

**INVESTORS' PERCEPTION TOWARDS SOCIALLY  
RESPONSIBLE INVESTMENT - A STUDY WITH SPECIAL  
REFERENCE TO STOCK MARKET INVESTORS IN KERALA**

*Thesis submitted to the*

**UNIVERSITY OF CALICUT**

*For the award of the degree of*

**DOCTOR OF PHILOSOPHY IN COMMERCE**

**UNDER THE FACULTY OF COMMERCE AND MANAGEMENT STUDIES**

By

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*Under the Supervision and guidance of*

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**December 2023**

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### **DECLARATION**

I hereby declare that this thesis entitled **“Investors’ Perception Towards Socially Responsible Investment - A Study with Special Reference to Stock Market Investors in Kerala”**, submitted to the University of Calicut, for the award of Degree of Doctor of Philosophy in Commerce, is a record of the bonafide research work carried out by me under the supervision and guidance of **Dr. Salini K**, Assistant Professor, Post Graduate Department of Commerce and Research, Vimala College (Autonomous), Thrissur. I also declare that this thesis has not been formed the basis for the award of any degree, diploma, associateship, fellowship or any other title of recognition from any university or institution and to the best of my knowledge and belief, it contains no material previously published by any other person, except where due references are made in the text of the thesis.

Place: Thrissur

Date: 21<sup>st</sup> December 2022

**Laya K S**

## **CERTIFICATE**

This is to certify that the thesis titled “**Investors’ Perception Towards Socially Responsible Investment - A Study with Special Reference to Stock Market Investors in Kerala**” submitted for the award of the degree of Doctor of Philosophy in Commerce from the University of Calicut, by **Ms. Laya K S** is a bonafide research work carried out under my supervision and guidance, and that this thesis has not formed the basis for the award of any degree, diploma, associateship, fellowship or any other title of similar recognition in this university or any other university or institution of higher learning. She is permitted to submit the thesis.

Place: Thrissur

**Dr. Salini K**

Date: 21 December 2023

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This is to certify that the adjudicators of the PhD thesis of Ms. Laya. K.S titled “Investors’ Perception Towards Socially Responsible Investment - A Study with Special Reference to Stock Market Investors in Kerala” have not given any directions for corrections or suggestions for change in their reports. The content of the CD is the same as in the hard copy.

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**CERTIFICATE ON PLAGIARISM CHECK**

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**Laya K S**



## **ABSTRACT**

### **Investors' Perception Towards Socially Responsible Investment- A Study with Special Reference to Stock Market Investors in Kerala**

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Socially Responsible Investment (SRI) incorporates environmental, social and corporate governance factors (ESG factors) into the investment decision-making process. It is an investor-driven philosophy of inclusion of best-in-class companies, or companies with good corporate social behaviour and CSR (Corporate Social Responsibility) practices and exclusion of unethical companies or sin stocks from the investment portfolio. It is a tool to attain the UN Sustainable Development Goals (SDGs). SRI is a firmly established investment segment in developed countries but has yet to gain momentum in developing countries like India. Lack of awareness of social responsibility-themed investment products and ESG risks and opportunities, lack of uniformity in ESG disclosures and reporting, lack of trustworthy ESG data, and lack of promotion from the regulatory authorities are the challenges that hinder the growth of SRI. Environmental threats created by corporates, challenges posed by pandemics, increased incidence of social issues and corporate scams induced the importance of considering social responsibility in stock market investment. These created SRI as a relevant topic under research in India over the past few years, including in South India. Even though the state of Kerala is well known for its outstanding achievement in education, health, e-governance and sustainable development, the concept of SRI is not prevalent in Kerala. Thus, in this context, the present study investigates how stock market investors in Kerala perceive and understand socially responsible investment (SRI) and what factors influence their perception and behaviour towards SRI.

This study is descriptive in nature, and a purposive sampling method using a structured questionnaire was used to collect data from stock market investors in Kerala. The study found that awareness of SRI is limited across investors in Kerala. The awareness is slightly higher for female investors and investors with higher educational backgrounds. It is also found that investors in Kerala positively perceive SRI. Attitude, financial performance, and environmental factors positively influence investors' behavioural intention to invest in SRI. The comparative performance analysis of sustainability-themed portfolios confirmed that these funds yielded a reasonable return with lower risk and volatility from 1st April 2017 to 31st March 2022. Thus, SRI is an investment opportunity for investors to satisfy their financial and non-financial objectives. 62 % of Kerala's population is below 40 years old; previous studies have indicated that young investors are more inclined towards SRI. Therefore, if investors in Kerala acknowledge the SRI opportunities and benefits, it can attract more people to stock trading and contribute to the environment, society, and the economy.

**Key words:** Socially Responsible Investment, ESG factors, Corporate Social Responsibility, Sustainable Development Goals, best-in-class

സംഗ്രഹം

**സാമൂഹിക പ്രതിബദ്ധതയുള്ള നിക്ഷേപത്തോടുള്ള  
നിക്ഷേപകരുടെ കാഴ്ചപ്പാട്-കേരളത്തിലെ ഓഹരി വിപണി  
നിക്ഷേപകരെ പ്രത്യേകം പരാമർശിക്കുന്ന ഒരു പഠനം**

ലയ കെ എസ്  
റിസർച്ച് സ്കോളർ  
കൊമേഴ്സ് ഗവേഷണ വിഭാഗം,  
വിമല കോളേജ് (ഓട്ടോണമസ്),  
തൃശൂർ.

സൂപ്പർവൈസിംഗ് ഗൈഡ്: ഡോ. ശാലിനി കെ  
അസിസ്റ്റന്റ് പ്രൊഫസർ  
കൊമേഴ്സ് ഗവേഷണ വിഭാഗം,  
വിമല കോളേജ് (ഓട്ടോണമസ്),  
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നിക്ഷേപ തീരുമാനം എടുക്കൽ പ്രക്രിയയിൽ, പാരിസ്ഥിതിക, സാമൂഹിക, കോർപ്പറേറ്റ് ഭരണ (ഇ എസ് ജി) ഘടകങ്ങൾ ഉൾക്കൊള്ളിക്കുന്ന നിക്ഷേപത്തെ സാമൂഹിക ഉത്തരവാദിത്തമുള്ള നിക്ഷേപം (എസ് ആർ ഐ) എന്ന് പറയുന്നു. മികച്ച കമ്പനികളെയോ, നല്ല സാമൂഹിക പെരുമാറ്റമുള്ള കമ്പനികളെയോ, സിഎസ്ആർ (കമ്പനികളുടെ സാമൂഹിക പ്രതിബദ്ധത) സമ്പ്രദായം ഉള്ള കമ്പനികളെയോ ഉൾപ്പെടുത്തുന്നതിനും, അധാർമിക കമ്പനികളെ വിവിധ നിക്ഷേപ സഞ്ചയത്തിൽ (നിക്ഷേപ പോർട്ട് ഫോളിയോ) നിന്നും ഒഴിവാക്കുന്നതിനും നിക്ഷേപകർ നയിക്കുന്ന തത്വശാസ്ത്രമാണിത്.

ഐക്യരാഷ്ട്രസഭയുടെ സുസ്ഥിരവികസന ലക്ഷ്യങ്ങൾ കൈവരിക്കുന്നതിനുള്ള മാർഗ്ഗമാണിത്. വികസിത രാജ്യങ്ങളിൽ വളരെയധികം പ്രചാരത്തിലുള്ള നിക്ഷേപ വിഭാഗമാണിത്, എന്നാൽ, ഇന്ത്യയെപ്പോലുള്ള വികസ്വര രാജ്യങ്ങളിൽ ഇതുവരെയും സാമൂഹിക ഉത്തരവാദിത്തമുള്ള നിക്ഷേപങ്ങളുടെ ആക്കം കൂടിയിട്ടില്ല. സാമൂഹിക ഉത്തരവാദിത്തമുള്ള നിക്ഷേപ ഉൽപ്പന്നങ്ങളെ കുറിച്ചും ഇ എസ് ജി അപകടസാധ്യതകളെയും, അവസരങ്ങളെയും കുറിച്ചുള്ള അവബോധത്തിന്റെ അഭാവം, ഇ എസ് ജി വെളിപ്പെടുത്തലുകളിലും റിപ്പോർട്ടിങ്ങിലും ഉള്ള ഏകീകൃതതയുടെ അഭാവം, വിശ്വസനീയമായ ഇ എസ് ജി വിവരങ്ങളുടെ അഭാവം, ഭരണസമ്പ്രദായത്തിൽ നിന്നും അധികാരികളിൽ നിന്നുമുള്ള അഭിപ്രായം പെടുത്തലിന്റെ അഭാവം എന്നിവ എസ് ആർ ഐ യുടെ വളർച്ചയെ തടസ്സപ്പെടുത്തുന്ന വെല്ലുവിളികളാണ്. കോർപ്പറേറ്റുകൾ സൃഷ്ടിച്ച പാരിസ്ഥിതിക ഭീഷണികൾ, പകർച്ചവ്യാധികൾ വർദ്ധിച്ചുവരുന്ന സാമൂഹിക പ്രശ്നങ്ങൾ, കോർപ്പറേറ്റ് തട്ടിപ്പുകൾ എന്നിവ ഓഹരി വിപണി നിക്ഷേപത്തിൽ സാമൂഹിക ഉത്തരവാദിത്തം പരിഗണിക്കേണ്ടതിന്റെ പ്രാധാന്യത്തിന്റെ ആക്കം കൂട്ടിയിട്ടുണ്ട്. ഈ കാരണങ്ങൾ ദക്ഷിണേന്ത്യയിൽ ഉൾപ്പെടെ കഴിഞ്ഞ കുറച്ചു വർഷങ്ങളായി ഗവേഷണത്തിന് വിധേയമായ ഒരു പ്രസക്തമായ വിഷയമായി എസ് ആർ ഐ യെ മാറ്റി. വിദ്യാഭ്യാസം, ആരോഗ്യം, ഈ-ഗവേൺസ്, സുസ്ഥിരവികസനം എന്നിവയിൽ മികച്ച നേട്ടങ്ങൾക്ക് പേരുകേട്ട സംസ്ഥാനമാണ് കേരളം, എങ്കിലും എസ് ആർ ഐ എന്ന ആശയം അധികം

പ്രചാരണത്തിൽ വന്നിട്ടില്ല. അതിനാൽ ഈ പശ്ചാത്തലത്തിൽ കേരളത്തിലെ ഓഹരി വിപണി നിക്ഷേപകർ സാമൂഹിക ഉത്തരവാദിത്തമുള്ള നിക്ഷേപത്തെ (എസ് ആർ ഐ) എങ്ങനെ കാണുകയും മനസ്സിലാക്കുകയും ചെയ്യുന്നു എന്നും, എസ് ആർ ഐ യോടുള്ള അവരുടെ ധാരണയെയും, പെരുമാറ്റത്തെയും സ്വാധീനിക്കുന്ന ഘടകങ്ങൾ എന്തൊക്കെയാണെന്നും ഇപ്പോഴത്തെ പഠനം അന്വേഷിക്കുന്നു.

ഈ പഠനം വിവരണാത്മക സ്വഭാവമുള്ളതാണ്. കേരളത്തിലെ ഓഹരി വിപണി നിക്ഷേപകരിൽ നിന്ന് വിവരം ശേഖരിക്കുന്നതിന് ഘടനാപരമായ ചോദ്യാവലി ഉപയോഗിച്ച്, ഒരു പർപ്പസീവ് സാമ്പിൾ രീതി അവലംബിച്ചും കേരളത്തിലെ നിക്ഷേപകരിൽ എസ് ആർ ഐ യെ കുറിച്ചുള്ള അവബോധം പരിമിതമാണെന്ന് പഠനം കണ്ടെത്തി. മറ്റു നിക്ഷേപകരെ അപേക്ഷിച്ച് വനിതാ നിക്ഷേപകർക്കും, ഉന്നത വിദ്യാഭ്യാസ പശ്ചാത്തലം ഉള്ള നിക്ഷേപകർക്കും അവബോധം അല്പം കൂടുതലാണ് എന്നും, കേരളത്തിലെ നിക്ഷേപകർ എസ് ആർ ഐ യെ ക്രിയാത്മകമായി കാണുന്നുണ്ടെന്നും കണ്ടെത്തിയിട്ടുണ്ട്. സാമൂഹിക പ്രതിബദ്ധതയുള്ള നിക്ഷേപത്തോടുള്ള നല്ല മനോഭാവം, സാമ്പത്തിക പ്രകടനം, പാരിസ്ഥിതിക ഘടകങ്ങൾ എന്നിവ എസ് ആർ ഐയിൽ നിക്ഷേപിക്കാനുള്ള നിക്ഷേപകരുടെ പെരുമാറ്റ ഉദ്ദേശത്തെ ക്രിയാത്മകമായി സ്വാധീനിക്കുന്നു സുസ്ഥിരത പ്രമേയം ആക്കിയ പോർട്ട്ഫോളിയോകളുടെ താരതമ്യപ്രകടനം വിശകലനം ചെയ്തതിൽ നിന്നും ഈ ഫണ്ടുകൾ 2017 ഏപ്രിൽ മുതൽ 2022 മാർച്ച് 31 വരെയുള്ള പഠനകാലഘട്ടത്തിൽ കുറഞ്ഞ അപകടസാധ്യത ഉള്ളതും, അസ്ഥിരതകുറവുള്ളതും, ന്യായമായ വരുമാനം നൽകിയതായും സ്ഥിരീകരിച്ചു. അതിനാൽ നിക്ഷേപകർക്ക് അവരുടെ സാമ്പത്തിക-സാമ്പത്തികേതര ലക്ഷ്യങ്ങൾ നിറവേറ്റാനുള്ള ഒരു നിക്ഷേപ അവസരമാണ് എസ് ആർ ഐ. കേരളത്തിലെ ജനസംഖ്യയുടെ 62 ശതമാനം 40 വയസ്സിന് താഴെയുള്ളവരാണ്, മുൻ പഠനങ്ങൾ സൂചിപ്പിക്കുന്നത് യുവനിക്ഷേപകർ എസ് ആർ ഐയിലേക്ക് കൂടുതൽ താല്പര്യമുള്ളവരാണ് എന്നാണ്. അതിനാൽ കേരളത്തിലെ നിക്ഷേപകർ എസ് ആർ ഐ യുടെ അവസരങ്ങളും നേട്ടങ്ങളും അംഗീകരിക്കുകയാണെങ്കിൽ അത് കൂടുതൽ ആളുകളെ സാമൂഹിക ഉത്തരവാദിത്തമുള്ള ഓഹരി നിക്ഷേപത്തിലേക്ക് ആകർഷിക്കുകയും, പരിസ്ഥിതിക്കും സമൂഹത്തിനും സമ്പത്ത് വ്യവസ്ഥയ്ക്കും സംഭാവന നൽകുകയും ചെയ്യും എന്ന് എൻറെ പഠനം വിലയിരുത്തുന്നു.

**പ്രധാന വാക്കുകൾ:** സാമൂഹിക ഉത്തരവാദിത്തമുള്ള നിക്ഷേപം, പാരിസ്ഥിതിക, സാമൂഹിക, കോർപ്പറേറ്റ് ഭരണ (ഇ എസ് ജി) ഘടകങ്ങൾ, കമ്പനികളുടെ സാമൂഹിക പ്രതിബദ്ധത, സുസ്ഥിര വികസന ലക്ഷ്യങ്ങൾ, അത്യുത്തമമായ കമ്പനികൾ.

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## ABBREVIATIONS

AIF	Alternative Investment Fund
AMFI	Association of Mutual Funds in India
APT	Arbitrage Pricing Theory
AUM	Assets Under Management
AVE	Average Variance Extracted
BAPM	Behavioural Asset Pricing Model
BIC	Best-in-Class
BRR	Business Responsibility Report
BRSR	Business Responsibility and Sustainability Reporting
BSE	Bombay Stock Exchange
CA100+	Climate Action 100+
CAGR	Compounded Annual Growth Rate
CB-SEM	Covariance-based Structural Equation Modeling
CDB	Community Development Banks
CDFI	Community Development Financial Institutions
CERES	Coalition for Environmentally Responsible Economies
CMV	Common Method Variance
CR	Composite Reliability
CSR	Corporate Social Responsibility
DEMATEL	Decision Making Trial and Evaluation Laboratory
DJSI	Dow Jones Sustainability Indexes

DSI	Domini 400 Social Index
EEA	European Economic Area
ESG	Environmental, Social, and Governance
ESGP	Environmental, Social, and Governance Performance
ETFs	Exchange-traded Funds
EU	European Union
FII	Foreign Institutional Investment
GIIN	Global Impact Investing Network
GIIRS	Global Impact Investing Rating System
GPs	General partners
GRI	Global Reporting Initiative
GSIA	Global Sustainable Investment Alliance
GST	Goal Setting Theory
HTMT	Heterotrait–Monotrait Ratio
IIC	Impact Investors Council
IICA	Indian Institute of Corporate Affairs
IOSCO	International Organization of Securities Commissions
IPSF	International Platform on Sustainable Finance
JSE	Johannesburg Stock Exchange
JSIF	Japan Sustainable Investment Forum
KSIDC	Kerala State Industrial Development Corporation
MAESGSLETF	Mirae Asset ESG Sector Leaders ETF
MCA	Ministry of Corporate Affairs

MI	Mission Investing
MSCI	Morgan Stanley Capital International
NGRBC	National Guidelines on Responsible Business Conduct
Nifty	National Stock Exchange FIFTY
NSE	National Stock Exchange
NVGs	National Voluntary Guidelines
PLC	Public limited companies
PLS	Partial Least Squares
PRI	Principles for Responsible Investment
RBI	Reserve Bank of India
RI	Responsible Investing
RIA	Responsible Investment Association
RIAA	Responsible Investment Association Australasia
SASB	Sustainability Accounting Standards Board
SD	Standard Deviation
SDGs	Sustainable Development Goals
SDT	Self-determination Theory
SEE	Social, Ethical, and Environmental
SEM	Structural Equation Modeling
SENSEX	Stock Exchange Sensitive Index
SES	Stakeholders Empowerment Services
SGB	Sovereign Gold Bonds
SIP	Systematic Investment Plans



SPSS	Statistical Packages for Social Sciences
SRI	Socially Responsible Investment
SRPI	Socially Responsible Property Investment
SSE	Social Stock Exchanges
SSE	Sustainable Stock Exchanges
TBL	Triple Bottom Line
TCFD	Task Force on Climate-related Financial Disclosures
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UK	The United Kingdom
UKSIF	UK Sustainable Investment & Finance Association
UN	United Nations
UNEP FI	United Nations Environment Programme Finance Initiative
UNGC	United Nations Global Compact
UNPRI	United Nations Principles of Responsible Investment
US	The United States
WBCSD	World Business Council for Sustainable Development

## **CHAPTER 1**

# **INTRODUCTION AND RESEARCH METHODOLOGY**

# CHAPTER 1

## INTRODUCTION AND RESEARCH METHODOLOGY

*“Sustainability is no longer about doing less harm. It’s about doing more good.”*

*Jochen Zeitz*

### **1.1. Introduction to Socially Responsible Investment (SRI)**

Global financial market has witnessed a significant transformation during the last three decades with the introduction of Socially Responsible Investment (SRI). It attracted the attention of investors, researchers, regulators, financial institutions and customers worldwide. SRI is an investor-driven phenomenon incorporating environmental, social and corporate governance parameters into the investment decision-making. SRI follows a triple-bottom-line approach of integrating environmental and social aspects with financial return. A socially responsible investor will consider, next to his financial return, the impact of his/her investment on the environment and society. Socially Responsible Investment (SRI) is also known as social investment, ESG (environmental, social and governance) investment, sustainable investment, sustainable and responsible investment, triple-bottom-line investment, social cautious investment, values-based investment, ethical investment, best-of-class investment and these terms often used interchangeably. SRI has recently emerged as an important financial opportunity for institutional and retail investors. Social and environmental factors are now being taken into consideration by investors when making investment decisions. The tremendous growth of the financial market made SRI a significant research area. Socially Responsible Investing (SRI) is gaining prominence in capital markets as it enables investors to make ethical investments and promotes responsible corporate behaviour (Talha et al., 2012). SRI is attracting both institutional and individual investors due to the increased interest of the public in corporate social responsibility (CSR) activities of corporates (Schepers & Sethi, 2003) and through SRI, investors can encourage companies to improve their actions on the environment, society, and corporate governance issues (Jun, 2013).

The ultimate aim of every investment is to maximize the risk-adjusted return (Escrig-Olmedo et al., 2013; Barom, 2015). Besides return, non-financial factors

influence investment decision-making (Leys et al., 2009). This concept of integrating non-financial factors into investment decision-making is known as socially responsible investment. According to the Social Investment Forum, Socially Responsible Investment (SRI) is an investment discipline that considers environmental, social, and corporate governance (ESG) factors in the investment process, achieving long-term financial return and positively impacting society. SRI creates more sustainable corporate behaviour as the investors are more cautious about environmental and social concerns in investment decisions. Investors and companies believe sustainable business practices can increase profitability and long-term value.

To a great extent, a company's financial and corporate sustainable performance depends on effectively managing corporate actions, goods, and services (Escrig-Olmedo et al., 2013). The socially responsible investment aims for long-term competitive returns with a positive societal impact. SRI comprises all asset classes: stocks, mutual funds, exchange-traded funds (ETFs), bonds, fixed-income securities, and community-oriented cash. Mutual funds, pension funds, insurance companies, and sovereign investors are the major players in the SRI market (Leys et al., 2009).

Initially, a business firm is viewed as a commercial entity only for profit making. It was also argued that government and non-profit organizations, not business firms, should tackle social responsibility issues. However, this concept began to change, and investors, academics, researchers, practitioners, experts and the business community started to focus on the non-financial aspects of corporations. They encouraged corporations to act in a sustainable and socially responsible manner. The potential for incorporating social responsibility issues into investments has significantly expanded in recent years, and both institutional and individual investors have begun to pay close attention to the operations of the firms in which they have invested. Investors began emphasizing the company's management quality, labour welfare, corporate initiatives towards society and the environment, product and service quality and financial success. Investors who give weightage to non-economic and economic factors are considered socially conscious, ethical or mission-based, green or socially responsible (Barom, 2015). Socially responsible investors can be categorized into two: value-driven and profit-seeking investors. Value-driven investors focus more on personal values and social aspects; they are even ready to

suffer financial losses for social responsibility. However, profit-seeking investors aim to make financial gains using social screens (Badía et al., 2021). Sparkes (2002) put forward two aspects of SRI: institutional investors prioritize maximizing financial returns by adhering to SRI guidelines, and retail investors prioritize avoiding social and environmental issues as much as possible.

SRI is not a charity. It is a combination of return with ethics and social welfare. An investment is always made with an expectation of something in return in the future; SRI enables investors to make double returns, financial and non-financial. SRI has two different components: social responsibility and financial return. SRI integrates financial factors with ESG criteria into investment decision-making (Knoll, 2002; Escrig-Olmedo et al., 2013). It is an investment strategy of balancing profits with social goals. Incorporating ESG consideration into investment decision-making may narrow the investment portfolio to companies that follow ethical standards, resulting in limited scope for diversification (Miralles-Quiro' & Miralles-Quiro', 2017). The SRI concept is rooted in the CSR philosophy (Agyapong & Ewusi, 2017). CSR has paved the foundation for SRI. SRI is an integral part of CSR in which the market expects socially responsible corporate behaviour (Gill & Mathur, 2018). SRI enables people with high morals and ethics to invest without compromising their basic values, effectively managing corporate behaviour (Chowdhary & Masih, 2015).

According to the Social Investment Forum (2006), a socially responsible investor should consider the CSR activities performed by the company along with his/her investment objectives. It is not entirely ethical; an additional aim is to make a financial gain (Norup & Gottlieb, 2011). SRI can be considered an alternative to traditional investment for those investors who wish to invest based on ethical criteria (Jansson & Biel, 2011). SRIs are becoming increasingly popular among investors because they concentrate on socially responsible corporates and avoid sin funds, but also because their returns are on par with traditional investments (Jo et al., 2012). Socially responsible investors consider corporate financial performance and social responsibility; they allocate financial resources based on organizations' social impacts (Puaschunder, 2016). They make investment decisions based on social, ethical, and environmental (SEE) criteria (Barom, 2015). A socially responsible investor incorporates environmental, social, and corporate governance aspects into every step

of the investment process. However, a traditional or ordinary investor will consider these aspects only when these issues directly affect their stock's value (Khan, 2022).

Since 2004, socially responsible investing has risen substantially due to several reasons, which include the influence of ESG issues on corporates, a reasonable return on SRI stocks, fiduciary duty of institutional investors, increased awareness of ESG issues, corporate transparency and disclosure requirements, mandatory regulations to investing, short-termism in market behaviour and corporate performance and reputational risk associated with ESG issues. Along with these reasons, the global crisis in 2008 also fuelled the growth of the SRI industry (Sinha & Datta, 2019). Employing a forward-looking strategy to minimize environmental and social issues a firm faces can create sustainable and financial wealth for the firm. Investors are becoming more aware of this aspect of sustainable value creation, leading to more firms engaging in socially responsible investment (Louche, 2009). The rise in consumer consciousness about environmental, social, and ethical issues, the increased demand for investment products by consumers, and the increased number of products that integrate social aspects also led to the growth of the SRI industry (Nilsson, 2008).

Investors' attitudes and expectations toward investment have changed a lot in recent times; they have started to incorporate ethical and moral norms into investment analysis (Hofmann et al., 2005). Investors interested in ethical investment have established institutions based on ethical criteria. Investors are becoming more concerned about the business's impact on the environment, society, economic well-being, and sustainability and believe that the business should be more responsible for sustainable development. This concern has given rise to socially responsible investing (SRI), a vital tool to control corporate behaviour. Thus, investors and other stakeholders can influence corporate behaviour through SRI (Talha et al., 2012).

As socially responsible investing (SRI) has gained more popularity in recent years, many international banks have formed specialized teams to focus on this form of investment. Financial institutions have also introduced a variety of exchange-traded funds (ETFs) and indexes that prioritize environmental, social, and governance (ESG) factors. The growing awareness and concern about the impact of human activities on the environment, such as global warming, natural resource depletion, and pollution,

drives the increased focus on SRI; this has led to more people seeking investments aligning with their values and promoting sustainability (Ranjan, 2013).

Recently, investors worldwide have prioritized socially responsible investment, directing their money towards companies that consider environmental, social, and corporate governance (ESG) factors in their operations. In India, socially responsible investing is gaining attention from businesses, the government, and market participants. As a result, many financial institutions in India are now evaluating the long-term growth potential of companies based on ESG parameters and incorporating ESG considerations into their investment strategies. Market participants believe monitoring and managing a company's ESG factors over time is critical for long-term financial stability and growth and essential for long-term financial success and value creation (White, 2023).

Due to the rising threat posed by climate change and the public's favourable perception of sustainable development, investors' attention has recently been drawn to socially responsible investments. The importance of ESG concerns to investors has also increased due to the COVID-19 pandemic. The ESG-rated firms became more popular during the COVID-19 pandemic and investors began including more ESG-rated firms in their portfolios. The reputational advantages and a higher risk-reward ratio influence investors' preference for sustainability-themed funds.

Globally, the total assets in socially responsible investment have increased by 129% from 2018 to 2020, equal to a compounded annual growth rate of 35%; the assets increased from USD 550 billion to USD 1258 billion. India's contribution to the global sustainable fund is limited to 0.05% (SEBI, n.d.). The Sustainable Development Goals (SDGs) paved a new path for corporate social behaviour. The primary aim of SDG 12 is to attain sustainable production and consumption and to ensure this, SDG 12.6 encourages companies to report their sustainable practices. This corporate sustainable reporting can benefit several stakeholders by monitoring the impact of corporations on the environment, society and corporate governance practices (stats.unctad.org). SRI is the strategy for achieving SDGs by directing SRI towards SDGs. According to UNCTAD, the global sustainability-themed investment increased by more than 80% from 2019 to \$3.2 trillion in 2020. The significant share of this investment consists of sustainable funds, which account for \$1.7 trillion,

followed by green bonds with a value of \$1 trillion and social bonds and mixed-sustainability bonds. SRI is the strategy for achieving SDGs by directing SRI towards SDGs. More investors are attracted to socially responsible investment-themed mutual funds and socially responsible companies. In certain countries, socially responsibility-themed funds attained a compounded annual growth rate of more than 50 per cent and the inflows to such funds experienced a significant surge. The companies have started changing their slogan of 'profit at the expense of everything else' to achieve the 3Ps of profit, people and planet (Narayanan & Sirigauri, n.d.). In the Asia-Pacific region, companies have adopted various strategies such as Corporate Social Responsibility, Socially Responsible Investment, and social business to address poverty and environmental issues (Pastakia, 2014).

At present, SRI is considered a mainstream investment strategy among ordinary investors as the investors recognize their ability to influence the companies positively. Investors also believe that socially responsible investments can outperform other investments (Agyapong & Ewusi, 2017). The mainstreaming of SRIs has resulted in many conventional companies offering SRI products to investors. Studies show that socially responsible investors hold securities for comparatively more extended periods and expect a return that is not lower than other investors. Even though they expect a return at par with conventional investment, some socially responsible investors are even ready to sacrifice return for corporate social responsibility (Escrig-Olmedo et al., 2013). Socially responsible investors consider both returns from the investment and the source from where the return is being made; they may expect the companies they invest in to also engage in sustainability initiatives (Khan, 2022).

Many business organizations have recently implemented various corporate social responsibility initiatives to satisfy shareholders and a wide range of stakeholders. These CSR initiatives are analyzed and reported by a plethora of information intermediaries and reported from time to time to the public as CSR ratings or CSR scores. Many voluntary reporting standards have emerged in addition to information intermediaries. Thus, the general public and shareholders quickly get those CSR initiatives, and organizations are more cautious about their activities (Ioannou & Serafeim, 2015).



People are more concerned about environmental issues and their impact on society and the ecosystem. Thus, investors prefer to invest in socially responsible companies, and they make sure that these companies do not create any social or environmental problems. The word 'ESG' has become extensively used all over the world and ESG techniques are being used throughout the organizations; regulators create ESG-related policies and disclosures, corporates develop ESG-based financial products, ESG parameters are used by investors in investment analysis and ESG data and ESG ratings issued by organizations (Samant & Singh, 2022). Socially responsible investment is the need of this era. Investors now seek to incorporate non-financial considerations into investment. Socially responsible investment tries to maintain a greener planet and protect the interests of shareholders and stakeholders, the environment, and society (Sorrosal-Forradas et al., 2023)

Currently, the concept of social responsibility is gaining more popularity in investment. Both individual and institutional investors are becoming more interested in the operations of the companies they invest in. These companies are assessed not only based on financial performance but also on the quality of products and services, impact on nature and society, and responsibility towards employees, which are also becoming more important. Those investors who are more concerned about all these aspects, such as profitability, operational efficiency, and integrity, while making investment decisions can be referred to as green, social, ethical, or socially responsible investors. The development of socially responsible investment forced companies to examine their social, ethical, and corporate responsibility policies (Barom, 2015; Yen et al., 2019). Many researchers underlined that the COVID-19 pandemic has fuelled the growth of ESG investment in India and globally (Pancholi et al., 2022; Sarangi, 2021; Narayanan & Sirigauri, n.d.). During the post-COVID-19 period, the ESG-themed ETFs outperformed the non-ESG-themed ETFs (Narayanan & Sirigauri, n.d.)

Investments in socially responsible companies are still in their infancy; they will develop and evolve. Socially responsible investors may change how investments are made and support corporate CSR initiatives by including non-financial factors (Louche, 2009). The socially responsible investor may hold the key to the financial market in the future, thereby creating a more financially responsible world (Vyas et

al., 2020). This SRI concept needs to be known by business executives, pension consultants, and even trustees of charities (Sparkes, 2002). In light of this, the interrelationship between investment decisions and social responsibility is a key research area today (Barreda-Tarrazona et al., 2011).

### **1.1.1. SRI Global Scenario**

Socially responsible investing has become increasingly popular in recent years, with a significant portion of professionally managed assets in the United States falling under this category. As of 2016, \$8.72 trillion of the \$40.3 trillion in managed assets in the US were considered socially responsible investments. This accounts for more than 20% of all assets under professional management in the country. Estimates show that the value of assets managed using socially responsible investing methods in the US increased by 33% between 2014 and 2016, rising from \$6.57 trillion to \$8.72 trillion. Research on socially responsible investing includes incorporating environmental, social, and governance (ESG) factors, impact investing, and various strategies such as positive or best-in-class and negative or exclusionary screening.

Initially, SRI was considered a niche market for mutual funds and unit trusts, and the quantum of investment was very low. Later, SRI became a mainstream phenomenon, expanding from its UK and US roots to the international level (Sparkes, 2002; Vandekerckhove et al., 2007; Jansson & Biel, 2011). The three vital factors behind mainstreaming the SRI industry worldwide are materiality, market demand and regulations. The materiality of SRI refers to the realization by investors, researchers, regulatory authorities, and the corporate world about the influence of ESG issues on the risk and return of corporates. Market demand refers to the increasing interest of investors in knowing how the companies are utilizing their funds. The third factor is the regulatory guidance from the regulatory authorities (Principles for Responsible Investment, 2021).

Globally, SRI is a dynamic and promising market (Barreda-Tarrazona et al., 2011). The past three decades have made SRI a well-known investment strategy. The major driving forces behind the development of SRI are the involvement of large institutional investors such as pension funds and mutual funds (Miralles-Quiro' & Miralles-Quiro,' 2017). SRI is now a mainstream phenomenon in many countries; the

government tries to regulate the SRI industry (Leys et al., 2009). Globally, the percentage of ordinary investors applying social responsibility criteria to investment decision-making has increased dramatically and there are more than 3300 sustainability-themed funds available for socially responsible investors.

In Europe and the United States, institutional investors are the major players in the SRI market. However, during the past five years, retail investors have shown interest in ESG investing (Ferraro, n.d.). The increased social awareness of ESG issues is one of the primary reasons for the global SRI movement (Badía et al., 2020). Many countries worldwide introduced mandatory disclosure of climate-related reporting of companies. The European Union (EU) introduced ESG disclosure for companies with more than 500 employees. New Zealand, the USA, Hong Kong, Singapore and Taiwan also introduced climate-related disclosure (SEBI, n.d.).

The Sustainable Development Goals (SDGs), the Paris Agreement, the Task Force on Climate-related Financial Disclosures (TCFD), and the United Nations Environment Programme Finance Initiative (UNEP FI) Sustainable Financial Roadmap Initiatives are the main forces advancing sustainable investment on a global scale. All UN member states adopted the Sustainable Development Goals (SDGs) in 2015 to ensure a sustainable future for all by 2030. It contains 17 Sustainable Development Goals to eradicate poverty and provide education, health care facilities, and equality. There are 169 targets and 231 indicators for the SDGs. Along with the 17 goals of SDGs, it places a significant emphasis on and promotes sustainable development. Investors are advised on the SDGs Investment Case from the Principles for Responsible Investment (PRI).

The Paris Agreement was put forward on 4 November 2016 to reduce greenhouse gas emissions and climate change. It provides financial assistance to developing countries to reduce emissions and coordinate the efforts of nations to reduce the impact of climate change. Investors, corporates, and asset managers are also trying to minimize the impact of their investments on climate change. The Task Force on Climate-related Financial Disclosures is an initiative by the Financial Stability Board to disseminate information related to climate change, as well as risks and opportunities related to climate change. This information aids in the understanding of financial disclosures relating to climate change by investors, asset

managers, banks, and insurance firms (Global Sustainable Investment Review, 2020). From FY 2021–2022, TCFD proposed premium companies in the UK to report on climate change, and from FY 2024–2025, it advised requiring all corporations, regardless of size, to make such disclosures (SEBI, n.d.).

The United Nations Environment Program Finance Initiative (UNEP FI) Sustainable Financial Roadmap Initiative is an integrated approach that aims to build a more sustainable financial system globally by integrating regionally-developed sustainable finance roadmaps (Global Sustainable Investment Review, 2020).

Globally, sustainable investment has shown enormous growth during the last three decades. In 2020, sustainable investment grew at an incredible rate. In the five key markets (namely; Europe, United States, Canada, Australasia, and Japan) global sustainable investment peaked at USD35.3 trillion at the beginning of 2020, an increase of 15% over the previous two years (2018-2020) and 55% over the previous four years (2016-2020). Table 1.1 illustrates the growth of SRI assets in the five major markets from 2016 to 2020.

**Table 1.1**

**Global Sustainable Investing Assets, 2016-2018-2020 (USD billions)**

<b>REGION</b>	<b>2016</b>	<b>2018</b>	<b>2020</b>
Europe	12040	14075	12017
United States	8723	11995	17081
Canada	1086	1699	2423
Australasia	516	734	906
Japan	474	2180	2874
<b>Total (USD billions)</b>	<b>22839</b>	<b>30683</b>	<b>35301</b>

*Source: Global sustainable investment review (2020)*

The growth of global sustainable investment shows a positive trend across all regions except for Europe. The declining trend in Europe may be due to the change in the definition of sustainable investment in Europe as per EU legislation. Global

sustainable investment assets have grown by almost 54%, from USD 22.8 trillion in 2016 to USD 35.3 trillion in 2020. The United States has been the leading region in sustainable investing, with assets worth USD 17081 billion in 2020. Sustainable investment has shown dramatic growth in Japan during the reported period, from 474 USD billion to 2874 USD billion. In other regions, namely, the United States, Canada, and Australasia, the investment almost doubled from 2016 to 2020.

### 1.1.1.a. Percentage of Sustainable Investment to Total AUM

The total assets under management (AUM) in the regions from 2016 to 2020 and the total sustainable investment to total AUM are presented in Table 1.2.

**Table 1.2**

#### **Percentage of Sustainable Investment to Total AUM**

<b>REGIONS</b>	<b>2016</b>	<b>2018</b>	<b>2020</b>
Total AUM of regions	81,948	91,828	98,416
Total sustainable investments only AUM	22,872	30,683	35,301
Percentage of Sustainable investments	27.9%	33.4%	35.9%
Increase of % sustainable investments (compared to the prior period)		5.5%	2.5%

*Source: Global sustainable investment review (2020)*

The table illustrates the growth in the total professionally managed assets under management throughout the reporting period, which reached USD 98.4 trillion in 2020. The total sustainable investment also shows a positive trend, rising from USD 22.8 trillion in 2016 to USD 35.3 trillion in 2020. The percentage of sustainable investment to total AUM reached 35.9% in 2020. That is, there is an increase of 2.5 percentage points over the prior reporting period. Sustainable investment has shown an increase of 5.5% in the percentage of sustainable investments from 2016 to 2018 and a further increase of 2.5% from 2018 to 2020.

### 1.1.1.b. Growth of Sustainable Investing Assets by Region in Local Currency 2014-2020

Table 1.3 presents the growth of sustainable investing assets by five key regions from 2014 to 2020.

**Table 1.3**  
**Growth of Sustainable Investing Assets by Region in Local Currency 2014-2020**

REGION	2014	2016	2018	2020	Growth 2014-2016	Growth 2016-2018	Growth 2018-2020	Compound Annual Growth Rate (2014-2020)
Europe	€9,885	€11,045	€12,306	€10,730	12%	11%	-13%	1%
United States	\$6,572	\$8,723	\$11,995	\$17,081	33%	38%	42%	17%
Canada	\$1,011	\$1,505	\$2,132	\$3,166	49%	42%	48%	21%
Australasia	\$203	\$707	\$1,033	\$1,295	248%	46%	25%	36%
Japan	¥840	¥57,056	¥231,952	¥310,039	6,692%	307%	34%	168%

*Source: Global sustainable investment review (2020)*

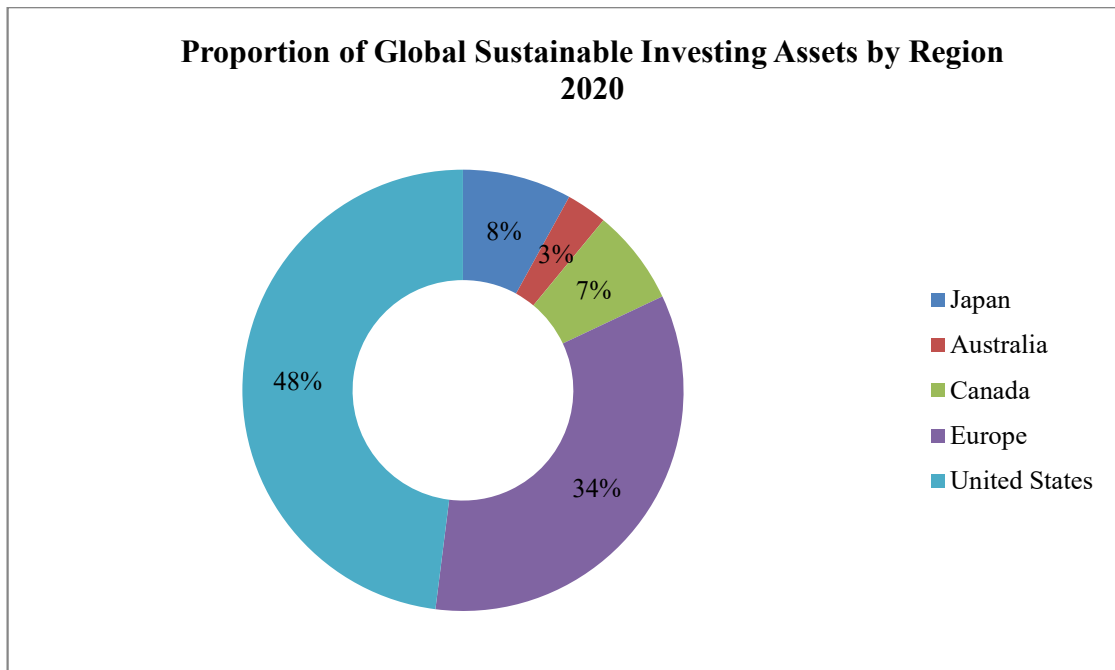
As per the Global Sustainable Investment Review (2020), Canada achieved the most significant percentage increase in socially responsible investment during 2018-2020, with a 48% growth rate and a compound annual growth rate of 21%. The compound annual growth rate is highest for Japan with 168% growth and Japan, Canada, Australasia, and the United States have strong period-based growth rates. In Europe, sustainable investment has shown a decline of 13% in the growth rate from 2018 to 2020. In all other regions, sustainable investment shows phenomenal growth.

### 1.1.1.c. The Proportion of Global Sustainable Investing Assets by Region

The United States held the most significant proportion of global sustainable investment, with 48% from 2018 to 2020, immediately followed by Europe with 34%. This implies that over 80% of the world's sustainable investment assets were still held

in the United States and Europe. The proportions for Canada and Japan are almost the same, with 7% and 8% respectively. Australia holds 3% of the world's SRI, the lowest percentage. Figure 1.1 illustrates a graphical breakdown of global sustainable investment assets across five regions from 2018 to 2020.

**Figure 1.1**



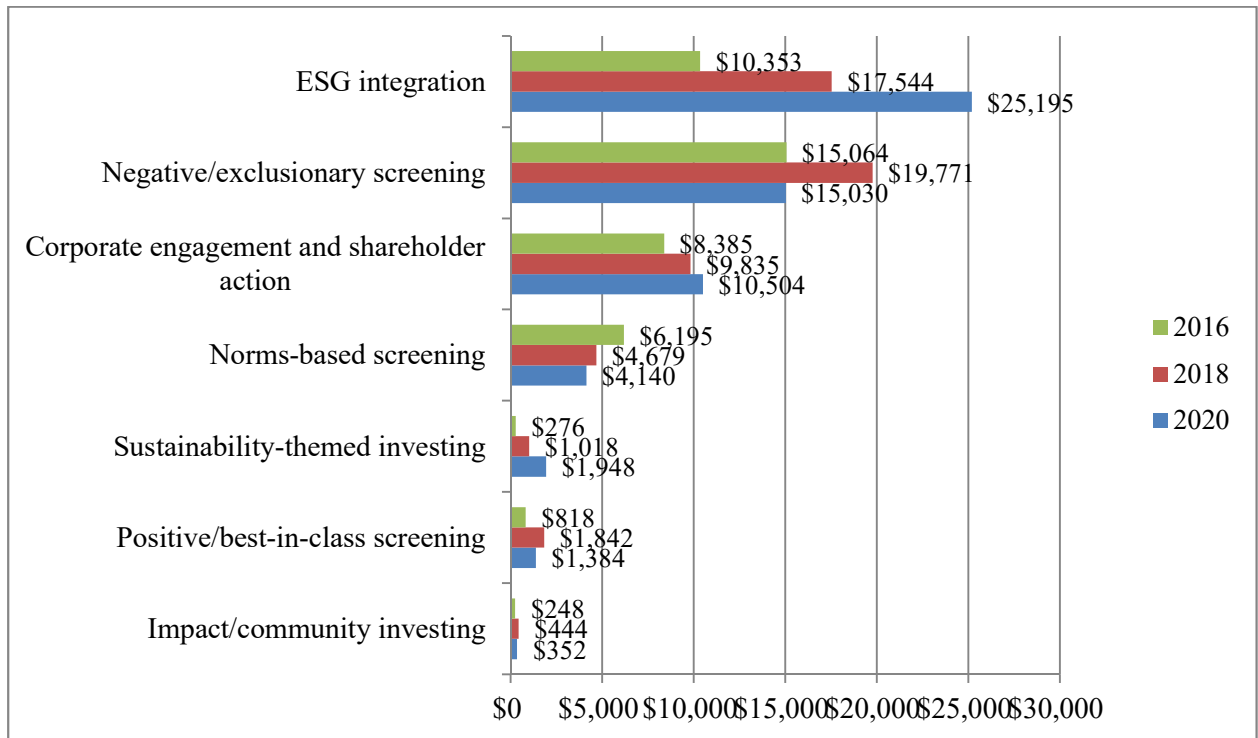
*Source: Global sustainable investment review (2020)*

#### **1.1.1.d. Global Growth of Sustainable Investing Strategies 2016-2020**

The approaches or methods investors use in investing in sustainable assets are called sustainable investing strategies. The Global Sustainable Investment Alliance classifies these strategies into seven groups: ESG integration, negative screening, corporate engagement or shareholder action, norm-based screening, sustainability-themed investing, positive/best-in-class screening, and impact/community investing. Figure 1.2 depicts the growth of sustainable investing strategies worldwide from 2016 to 2020

**Figure 1.2**

**Global Growth of Sustainable Investing Strategies 2016-2020**



Source: Global sustainable investment review (2020)

**Table 1.4**

**Global Growth of Sustainable Investing Strategies 2016-2020**

	2020	2018	2016	GROWTH 2016-2020	COMPOUND ANNUAL GROWTH RATE
ESG integration	\$25,195	\$17,544	\$10,353	143%	25%
Negative screening	\$15,030	\$19,771	\$15,064	0%	0%
Corporate engagement or Shareholder action	\$10,504	\$9,835	\$8,385	25%	6%
Norm-based screening	\$4,140	\$4,679	\$6,195	-33%	-10%
Sustainability-themed investing	\$1,948	\$1,018	\$276	605%	63%
Positive/best-in-class screening	\$1,384	\$1,842	\$818	69%	14%
Impact/Community investing	\$352	\$444	\$248	42%	9%

Source: Global sustainable investment review (2020)



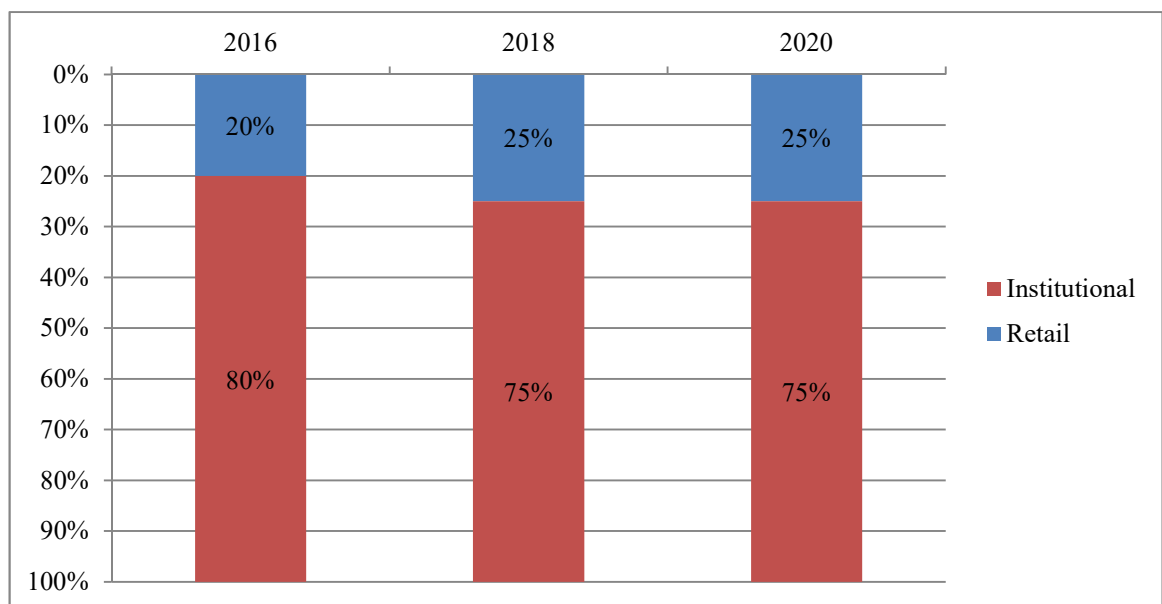
According to the Global Sustainable Investing Alliance’s study (2020), there were positive and negative changes in sustainable investing strategies from 2016 to 2020. ESG integration, sustainability-themed investing, positive/best-in-class screening, and corporate engagement or shareholder action have shown continued growth over time. Both impact/community investing and negative screening have shown fluctuating trends since 2016. However, the norm-based screening strategy showed a negative trend with a -33% growth rate and a -10% compounded growth rate.

**1.1.1.e. Global Shares of Institutional and Retail Sustainable Investing Assets 2016-2020**

Institutional investors dominated the market during the early stages of socially responsible investment. In 2012, institutional investors possessed 89% of assets, while individual investors held only 11% of those sustainable assets. The following Figure 1.3 portrays the proportion of global shares of sustainable investment held by institutional and individual investors from 2016 to 2020.

**Figure 1.3**

**Global Shares of Institutional and Retail Sustainable Investing Assets 2016-2020**



*Source: Global sustainable investment review (2020)*

Figure 1.3 shows the gradual growth in retail investors' ownership of worldwide shares of sustainable investments from 2016 to 2020. It was raised from 20% in 2016 to 25% in 2018 and kept the same percentage in 2020.

### **1.1.2. SRI in India**

Socially responsible investing (SRI) is becoming a mainstream trend among market participants in India as the country aligns itself with international market trends. According to a report by cKinetics (2018), foreign capital flow to socially responsible investment in India has grown by four per cent and domestic SRI assets have increased by 70 per cent since 2017. The aim of socially responsible investment is to generate a favourable return for investors and positively impact society and the environment, thereby benefiting underprivileged communities in India. In India, SRI is one of the most flourishing investment strategies; more than \$ 5.2 billion has already invested in SRI since 2010, as per Mckinsey's report. SRI is a combination of profit and purpose. SRI has strong connections to CSR, and CSR legislation may promote investment initiatives that follow SRI principles. In India, the business community and other stakeholders, specifically millennials, recognized the need and importance of sustainable investment, and companies strive for socially responsible practices (Sethi, 2022). Indian investors are generally unaware of the advantage of ESG integration to investment analysis. Lack of awareness and publicly available information on the ESG practices of corporates are two primary reasons behind the slow movement of the SRI market in India (Singhal, 2021; Tripathi & Bhandari, 2015).

Besides financial factors, non-financial factors such as human rights, environment, social justice, and bio-diversity considerably impact investment and companies. The number of ESG-based funds is increasing due to the investors' belief that socially responsible companies have lower risk and long-term development opportunities. Thus, the focus on ESG is growing in India in line with the global SRI movement. The increased emphasis on ESG parameters may create foreign capital inflow to Indian corporates and FIIs may choose to invest in those ESG-based companies in India (Samant & Singh, 2022).

Stakeholders Empowerment Services (SES) conducted an ESG performance analysis of the top 100 Indian companies. The companies were selected based on their market capitalisation on 31st March 2020. The analysis is based on five parameters: policy disclosures, environmental parameters, social parameters, corporate governance parameters and overall ESG scores. Infosys Ltd. ranked top in overall ESG scores with an A grade and Mahindra & Mahindra secured second position with a B+ grade. Tech Mahindra Ltd secured the third rank, Housing Development Finance Corporation secured the fourth rank and Adani Ports and Special Economic Zone Ltd secured the fifth rank in overall ESG performance. These companies are from the IT, automobile, finance, and services industries. Regarding policy disclosures, Tata Motors Ltd. secured first rank with an A+ grade and ITC Ltd secured first rank with an A+ grade for environmental parameters. Adani Transmission secured first rank for social parameters and Infosys Ltd secured first rank for governance parameters.

Amid the COVID-19 pandemic, many investors turned their attention to sustainable investing. Companies consider incorporating ESG factors into their operation to be a complex process. However, institutional investors view ESG as an important factor and make ESG parameters in their investment decisions. The COVID-19 crisis and many high-profile scams expedited the growth of SRI in India. In recent years, many ESG-themed funds have launched in India and sustainability-themed indices outperformed other market indices during covid-19 crisis. In 2020, the Nifty ESG index outperformed Nifty 50 in terms of five-year return. Globally, most large organizations are continuously adopting ESG plans at the board level to protect the interest of their investors; Indian companies are not subject to any standardized guidelines governing ESG disclosures. As India is the world's third largest producer of carbon dioxide, industries and companies encourage alternative energy sources, new technologies, and low carbon emissions (Badkar, 2022).

After the COVID-19 pandemic and the structural change that followed COVID-19, more attention is being paid to ESG in India. From 31st January 2020 to 31st December 2021, the AUM of ESG-based mutual funds in India have increased from ₹ 2747.66 Cr to ₹ 12544.02 Cr. After January 2020, eight ESG-based funds were launched in India. It is the evidence of increased awareness and preferences for

socially responsible investment among Indian investors and asset management companies (Samant & Singh, 2022).

## **1.2. Statement of the Research Problem**

The investment sector has undergone a massive transformation during the last three decades. The growth of socially responsible investment is one of the significant trends in the business world. The expanding significance of the SRI industry worldwide has made academics and organizations to take sustainable investing seriously (Nilsson, 2008; Siddiqui, 2018). Business ethics is becoming a thriving academic field, but more analysis needs to be made on SRI (Sparkes, 2002). Global investors are more concerned about ESG performance and disclosures. Therefore, adhering to ESG guidelines and disclosures is essential for attracting foreign capital and global investors (Chelawat & Trivedi, 2016). SRI is a tool to promote responsible corporate behaviour and is considered a path to attaining UN Sustainable Development Goals (SDGs).

India is one of the most populated countries; at the same time, it is one of the most polluted countries in the world. The country is also grappling with issues associated with exploitation of the workforce, gender inequality, illiteracy, child labour, poverty, unemployment, global warming, climate change and natural calamities. Many cities in India suffer from severe air pollution; Delhi is a notable example. The Baghjan gas leak tragedy in 2020 (Assam) is an absolute example of the disruption of environmental and social laws by Oil India Limited. This incident led to severe damage to the environment and lost lives of three people. The company failed to meet the workers' safety measures. These highlight the importance of considering and identifying solutions to social and environmental issues. Considering the governance side, Enron and Satyam scams are examples of a lack of proper corporate governance in India. These corporate scams in India have also made investors, regulators, corporates and governments more concerned about the importance of sustainability in investment. The Covid-19 pandemic has also emphasized the significance of ESG factors.

Compared to developed countries, the number of studies on SRI is limited in India, and the majority of these Indian studies focus on the comparative performance analysis of social responsibility-themed funds and conventional funds. These studies are primarily concentrated on the perspective of firms' performance. The results of most of these studies demonstrated equal performance of SRI with conventional funds. Some studies have shown the outperformance of SRI (Sudha, 2015; Tripathi & Bhandari, 2015; Chakrabarty et al., 2017; Dalal & Thaker, 2019; Jasuja et al., 2021; Sood et al., 2022), and only a few studies have resulted in the underperformance of SRI. This indicates that investors can achieve good returns from SRI investments, allowing them to align their social values without compromising their returns.

The number of studies on the perception of Indian investors towards SRI is also limited. It is evident from these studies that Indian investors have a positive attitude towards SRI. However, a lack of awareness is found to be a hesitating factor that prevents investors from engaging in SRI (Reka, 2017; Nagpal & Chadha, 2021; Chhetri & Sharma, 2022; Jonwall et al., 2022).

There are prospects for SRI investing in India; however, it is not prevalent. However, the concept is gaining momentum in the last few years. The government, financial market regulators, financial intermediaries, investors, and all other stakeholders recognised the need for SRI in India and are actively promoting initiatives like social stock exchanges (SSE), environmental, social, and governance (ESG) ratings and scores, business responsibility and sustainability reporting (BRSR) of companies, sustainability-themed mutual funds, indices, and sustainable stock exchanges. In India, there are eleven ESG-themed mutual funds, six established in 2020 and two introduced in 2021, with a value of around 13000 crores. This highlights the rising interest of the Indian capital market toward socially responsible investment. Now, numerous opportunities are available for investors who wish to invest based on the social responsibility theme; the popularity of SRI is limited and ordinary people lack awareness on SRI. Investors increasingly recognised that companies that follow sustainable corporate behaviour and comply with ESG parameters offer better potential returns and greater value to shareholders (Pancholi et al., 2022; Jain & Singh, n.d.). However, firms are not actively communicating the benefit of ESG integration to the investors, making ESG seem attractive to only a

small number of investors. Making investors understand the financial and non-financial benefits of SRI requires further reinforcement in this field. SRI stands as an opportunity for people to satisfy their social responsibility by investing in companies that comply with CSR standards and principles and avoiding investment in companies that are against social responsibility. If all the investors recognize the concept of socially responsible investment and become socially responsible, then there will be no demand for stocks of socially irresponsible companies (Tripathi & Bhandari, 2015).

While the concept of SRI has been extensively researched in India over the past few years, including in South India, no study has been conducted on how investors in Kerala perceive socially responsible investments. Kerala is known for its exceptional standards in education, health, literacy, e-governance, transparency, employability, banking penetration and digitalization. Kerala is the top state in India in terms of the Sustainable Development Index, Overall Health Performance Index, and School Education Quality Index of NITI Aayog, and it also ranks second in the Energy and Climate Index. Kerala has a proactive approach towards sustainable development and social welfare. Kerala is India's first state to advance the concept of 'Responsible Industry: Responsible Investment'. The government declared 2022 as 'Entrepreneurship Year' and KSIDC (Kerala State Industrial Development Corporation) introduced the idea of 'Responsible Industry' and 'Responsible Investment' as their motto to recuperate the state from the adverse effects of the Covid-19 pandemic and other natural disasters. The state also considers ESG factors in industrial development initiatives and supports MSMEs' ESG-based growth. Additionally, the government promotes ESG rating of MSMEs and adheres to UNSDGs and Sustainability Accounting Standards Board (SASB) rules. Thus, there is a vast scope for socially responsible investment in Kerala.

Recently, the state has witnessed a significant increase in investors' participation in share trading, particularly among the younger generation. However, it is notable that socially responsible investment (SRI) is yet to be prevalent in Kerala. Hence, it is becoming increasingly clear that socially responsible investment needs further push and guidance from the corporate sector, government, financial institutions, and regulators. Many studies have been conducted in India and Kerala on companies' corporate social responsibility (CSR) practices and initiatives. These

studies primarily examine the social responsibility undertaken by companies and their management. None of the studies focused on the social responsibility of investors in Kerala. Thus, the present study examines the social responsibility of investors; it seeks to measure the extent to which investors acknowledge and consider the social responsibilities performed by companies. Based on the above problems, the research gap has been identified. Thus, in this context, the present study becomes essential to fill the research gaps in awareness, perception towards SRI and factors influencing socially responsible investment.

In light of this, it asserts research questions: To what extent do stock market investors in Kerala perceive and understand socially responsible investment (SRI), and what factors influence their perception and behaviour towards SRI? This study aims to find a solution to this question.

### **1.3. Research Gap**

The literature confirms that most studies on socially responsible investing (SRI) have concentrated on SRI performance and compared to conventional fund performance. SRI has gained global attention during the last three decades; there needs to be more region-wise studies which focus on awareness and perception towards SRI in specific areas of India, including Kerala. Most of these research studies were conducted in developed SRI markets, including the US, the UK, and Europe. The number of studies conducted in developing economies like India is significantly less, particularly in the state of Kerala; studies on SRI have yet to be found to date. The SRI market is now one of the most flourishing financial market segments, and more investors are interested in SRI.

Along with institutional investors, retail investors are contributing more to SRI, and the Indian capital market is also experiencing this trend. However, more research needs to be conducted on how individual investors perceive and approach SRI, with most studies focusing on institutional investors. The number of ESG-based funds is increasing in India, more ESG disclosures are being made mandatory in India, and more investors are focusing on corporate social performance along with financial performance. From the previous literature, it is found that there are only a few studies related to Indian investors' perception towards SRI, and no studies

addressed the perception of investors in Kerala towards SRI. In this context, this study addresses the awareness level, perception and behavioural intention of investors in Kerala towards SRI.

The scope of most of the previous studies related to the intention to invest in SRI and SRI behaviour was confined to the Theory of Planned Behaviour (TPB) components. Researchers also extended the TPB model by including moral intensity, religiosity, perceived consumer effectiveness, perceived risk, financial factors, financial literacy, environmental concern, and more. Some research concentrated solely on the impact of ESG elements on investors' intentions to invest in SRI. However, no research has been extended to study the behavioural intention towards SRI by combining the elements of TPB with ESG factors and financial performance. This study attempts to fill this gap in the existing research environment.

#### **1.4. Significance of the Study**

BSE is the first Asian stock exchange to join the Sustainable Stock Exchange Initiative, launched by UNCTAD, to encourage socially responsible investing and increase business sustainability. By signing the Paris Agreement at the United Nations Climate Change Conference in 2015, India's Prime Minister promised to achieve net zero emissions by 2070. Socially responsible investment (SRI) is one of the mainstream investment strategies in the global scenario. The previous studies confirmed that individual and institutional investors are interested in socially responsible investment. The comparative performance analysis of social responsibility-themed investment with conventional funds showed no significant difference between SRI and conventional funds. Thus, investors can earn better or equal returns from SRI without compromising social values. SRI can positively influence corporate social behaviour. Today's investors are more concerned about the impact of their investment on the environment, society and the planet as a whole. They started classifying the companies into good and bad according to their behaviour and ESG compliance. Compliance with ESG parameters may help the company earn better returns and long-term viability. Companies that do not comply with ESG parameters may find it challenging to raise capital in the future (Akhilshwari et al., 2021). The ESG risk affects the financial performance of companies.



There is a causal relationship between business firms and social responsibility issues. The absence of social responsibility in the business may create economic costs. Thus, companies worldwide recognize the need for social responsibility in their business practices, and the value of business can be enhanced by considering ESG factors (Sinha et al., 2020).

Business is a part of society. The business receives its inputs from society; thus, it has to deliver specific positive outputs to society. The business has a certain responsibility to society along with maximizing the wealth of equity shareholders. It is observed that socially responsible corporate behaviour may maximize the wealth of equity shareholders and increase the present value of future cash inflows (Mackey et al., 2007). SRI is considered as a tool to improve sustainable development. Today's world faces numerous socio-economic issues, such as rampant poverty, massive unemployment, discrimination, economic backwardness, and poor governance, resulting in rising public expectations of corporate sustainable behaviour. Global concerns about social, environmental, and ethical issues rose due to increasing corporate scandals, corruption, and environmental degradation. These resulted in the introduction and implementation of international standards and codes of conduct for corporate behaviour worldwide. The doctrines of Corporate Social Responsibility (CSR), corporate citizenship, sustainable development, and corporate governance have been developed. The business should satisfy its legal, moral, ethical, and charitable obligations to society by balancing its economic performance. Through SRI, investors can indirectly motivate corporate behaviour to promote environmental well-being, sustainable development, societal commitment, and good corporate governance (Sun et al., 2011). Increasing investments in socially responsible companies, projects and funds can promote India's regional development. Kerala is a state with a high population density; thus, every development in the state should be made with sustainable consciousness. The state government is giving more importance to sustainable investment and sustainable development. The state consists of young population more and if they are more aware of the scope of responsible investment, they will be attracted to responsible share trading rather than mere gambling.

This study would become significant as it focuses on assessing the awareness and perception of investors in Kerala towards socially responsible investment. It is helpful for investors in Kerala to understand in detail about socially responsible investment and can invest in socially responsible companies and social responsibility-themed funds. It also enables asset managers, companies, and stock brokers to recognize SRI's motivation and attract investors accordingly.

## **1.5. Objectives of the Study**

The main objectives of the present study are as follows:

1. To estimate the awareness level of Socially Responsible Investment by the stock market investors in Kerala.
2. To measure the perception of stock market investors of Kerala towards the concept of Socially Responsible Investment.
3. To understand the behavioural intention of stock market investors in Kerala towards Socially Responsible Investment.

## **1.6. Research Hypotheses**

Various hypotheses are formulated based on the objectives of the study and proposed analysis of the study.

### **1.6.1. General Hypothesis**

H1: There is a significant difference in the influence of motives for investing in the stock market

### **1.6.2. Objective I- Related to Awareness on Different Aspects of Socially Responsible Investment**

H2: There is a significant difference in the awareness on different aspects of socially responsible investment with regard to gender, age, educational qualification, occupation, marital status, average annual income and experience of stock market investors

H3: There is a significant difference in the awareness on sustainability-themed indices with regard to gender, age, educational qualification, occupation, marital status, average annual income and experience of stock market investors

H4: There is a significant difference in the awareness on sustainability-themed funds with regard to gender, age, educational qualification, occupation, marital status, average annual income and experience of stock market investors

H5: There is a significant difference in the general awareness related to sustainability with regard to gender, age, educational qualification, occupation, marital status, average annual income and experience of stock market investors

H6: There is a significant difference in the overall awareness on socially responsible investment with regard to gender, age, educational qualification, occupation, marital status, average annual income and experience of stock market investors

### **1.6.3. Objective III- Related to Factors Influencing Behavioural Intention to Invest in SRI**

H7: There is a significant positive influence of attitude towards SRI on behavioural intention to invest in SRI

H8: There is a significant positive influence of subjective norms on behavioural intention to invest in SRI

H9: There is a significant positive influence of perceived behavioural control on behavioural intention to invest in SRI

H10: There is a significant positive influence of social factors on behavioural intention to invest in SRI

H11: There is a significant positive influence of financial performance on behavioural intention to invest in SRI

H12: There is a significant positive influence of corporate governance factors on behavioural intention to invest in SRI

## **1.7. Scope of the Study**

This study focuses on awareness and perception of the concept of socially responsible investment and behavioural intention towards socially responsible investment among stock market investors in Kerala.

The geographical scope of the study is limited to three districts selected from three regions of Kerala, namely, the north, south, and central regions. Socially responsible investing behaviour can be seen in the area of real estate, the agriculture sector, consumption of FMCGs, the health sector and other sectors. However, this study is confined only to the stock market investors. Investors can be classified into institutional and individual or retail investors, but this study is focused only on retail investors.

There are different theories addressing the behaviour of individuals: Self-Determination Theory (SDT), Theory of Reasoned Action (TRA), Social Cognitive Theory, Ecological Model (Social-Ecological Model) and Cognitive-Behavioural Theory (CBT), but for this study, the Theory of planned behaviour (TPB) propounded by Ajzen (1991) was used. The actual behaviour cannot be studied since the concept of SRI is not so prevalent in Kerala. The behavioural intention towards SRI is studied in this research.

## **1.8. Research Methodology**

The research methodology has been finalised after considering the study's objectives, significance, and scope. The following are the methodologies used in the present study.

### **1.8.1. Research Design**

The present study is descriptive in nature. It is descriptive that it tries to study the awareness, perception, and behavioural intention of investors and the researcher does not have any direct control over the respondents (Sue & Ritter, 2012). The survey method was used to collect data from the respondents. For this, a structured pre-tested questionnaire was prepared.

### **1.8.2. Sources of data**

For this study, data was collected from primary and secondary sources. The awareness, perception and behavioural intention towards socially responsible investment were studied with the help of primary data collected through a sample survey conducted among stock market investors in Kerala.

The study also evaluated the performance of social responsibility-themed mutual funds and socially responsible thematic indices. The Association of Mutual Funds in India (AMFI) website was used to collect the daily NAV series for mutual fund schemes, and the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) websites were used to gather the closing price data for various indices. The other secondary data sources used for the study include research reports, journal articles, working papers, newspapers, theses, books, and various websites.

### **1.8.3. Pilot study**

A pilot study was conducted to test the reliability and validity of the research instrument and to examine the feasibility of the study and finalisation of the variables. Data was collected from a sample of forty stock market investors. Based on the feedback from the pilot study, suitable modifications were made to the research instrument, and after that, data collection started.

### **1.8.4. Sampling Design**

The stock market investors in Kerala constitute the target population for this study. Since the population is substantial, a census survey is impossible. Hence, a sample survey has been carried out. Though the population of the study is finite, but the exact number of individuals having share market investments was not available from the stock brokers or any other authorized authorities, as the stock broking firms were not willing to disclose the details of their clients. Since no formal list of investors is available, probability sampling techniques were impossible. Therefore, purposive sampling comes under the category of the non-probability method of sampling used to collect the required sample. The investors with active demat accounts belonging to any of the three selected districts, namely Thiruvananthapuram, Ernakulam and Kozhikode, were selected.

#### 1.8.4.1. Sample Size Determination

Stock market investors of Kerala form the universe of the study. The exact data regarding the number of stock market investors in Kerala and their geographical distribution are unavailable. The following statistical formula is used to calculate the sample size for this study. The highest standard deviation among variables from the pilot study was taken.

$$n = (zs/e)^2$$

n = size of sample

z = z value for 95% confidence level is = 1.96

s = sample standard deviation (.606)

e = acceptable sampling error (e=0.05)

$$\text{The required sample size } n = (1.96 \times .606/0.05)^2 = 564$$

Therefore, the minimum sample size for this study has been fixed at 564.

#### 1.8.5. Method of Primary data collection

For the study, a multi-stage sampling procedure was used. Initially, Kerala was divided into the Southern, Central, and Northern regions. The southern region includes Thiruvananthapuram, Kollam, Pathanamthitta, and Alappuzha. The central region includes Kottayam, Idukki, Ernakulam and Thrissur. The state's northern region includes Palakkad, Malappuram, Kozhikode, Wayanad, Kannur, and Kasargod. In the second stage, three districts were selected from the three regions by random sampling using a lottery method:

- Thiruvananthapuram was selected from the southern region.
- Ernakulam was selected from the central region.
- Kozhikode was selected from the northern region.

In the third stage, information was gathered from the required number of sample investors using the purposive sampling method of data collection online and offline. Through online mode, the questionnaires are mailed to the respondents and various social media platforms are used for data collection. The researcher visited numerous stock broking firms in the selected districts to collect information from investors offline.

#### **1.8.5.1. The Instrument used for Primary data collection**

A pre-tested questionnaire was used to collect data from the investors. The research instrument is given in Appendix I at the end of the report. The questionnaire starts with respondents' demographic information, followed by information related to stock market participation, awareness on different aspects of socially responsible investment, perception towards different aspects of socially responsible investment and behavioural intention towards SRI. The behavioural intention towards SRI was studied with the help of the Theory of planned behaviour (TPB) introduced by Icek Ajzen (1985, 1991). The items in the scale used for studying behavioural intention were adopted from Raut et al. (2021); Jensen et al. (2016); Yew et al. (2019) and additional items were included by the researcher based on variables identified during the literature review.

#### **1.8.5.2. Theory of Planned Behaviour (TPB)**

Human behaviour is highly complex. This complex human behaviour can be predicted and explained by the Theory of Planned Behaviour (Ajzen, 1991). The Theory of Planned Behaviour is propounded by Icek Ajzen (1985, 1991) as an extension to the Theory of Reasoned Action (TRA). The Theory of Reasoned Action (TRA) is extended by adding the construct of perceived behaviour control and designed the Theory of Planned Behaviour.

TRA was developed by Martin Fishbein and Icek Ajzen in 1975, and it traces the causal relationship between beliefs and actual behaviour through attitude and intention. Two psychological theories of health behaviour change are integrated to develop the theory of reasoned action and the theory of planned behaviour. It explains and predicts human behaviour. The theory of reasoned action predicts volitional behaviour. Volitional behaviour means people can efficiently perform those

behaviours if they desire to do so. This theory is based on the assumption that people usually behave sensibly. This theory is modified and developed into the theory of planned behaviour. Behavioural intention is a combination of attitude towards the behaviour, subjective norm and perception of behavioural control. These factors can influence individual and collective behavioural intention.

A positive attitude, the favourable subjective norm with an enhanced sense of perceived control, can enhance the intention to perform behaviour. These three constructs together can predict the behavioural intention. Thus, behavioural intention is a function of these three constructs: the individual's personal nature, the influence of society on behaviour and the control or lack of control over behaviour (Ajzen, 2006). The Theory of Planned Behaviour has applications in several contexts.

### **1.8.5.3. Research Model Development**

The behavioural intention to invest in socially responsible investment is investigated by different authors using the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB). Nilsson (2008) examined the influence of social, environmental, and ethical factors and financial perception on socially responsible investment behaviour. The socio-demographic variables are also studied in the model. Talha et al. (2016) used the TPB model to explain the socially responsible investment behaviour of institutional investors in Malaysia. The authors extended the TPB framework by adding the constructs of moral intensity and caring ethical climate along with the TPB constructs of attitude, subjective norms, perceived behavioural control and intention. The moderation effect of gender is also included in the model. Osman et al. (2019) studied the factors influencing the behavioural intention towards green investment. The constructs of knowledge, reputation and religious values were added along with other constructs of TPB.

Sultana et al. (2018) evaluated the influence of environmental, social and corporate governance issues on investment decisions of Bangladesh stock market investors. The influence of the purpose of investment is also included in the model and the construct investment horizon is employed as a moderating variable in the study. Khan and Alam (2019) employed the TPB model to study the individual investors' attitudes towards SRI in India. Moral norms and religiosity are included in

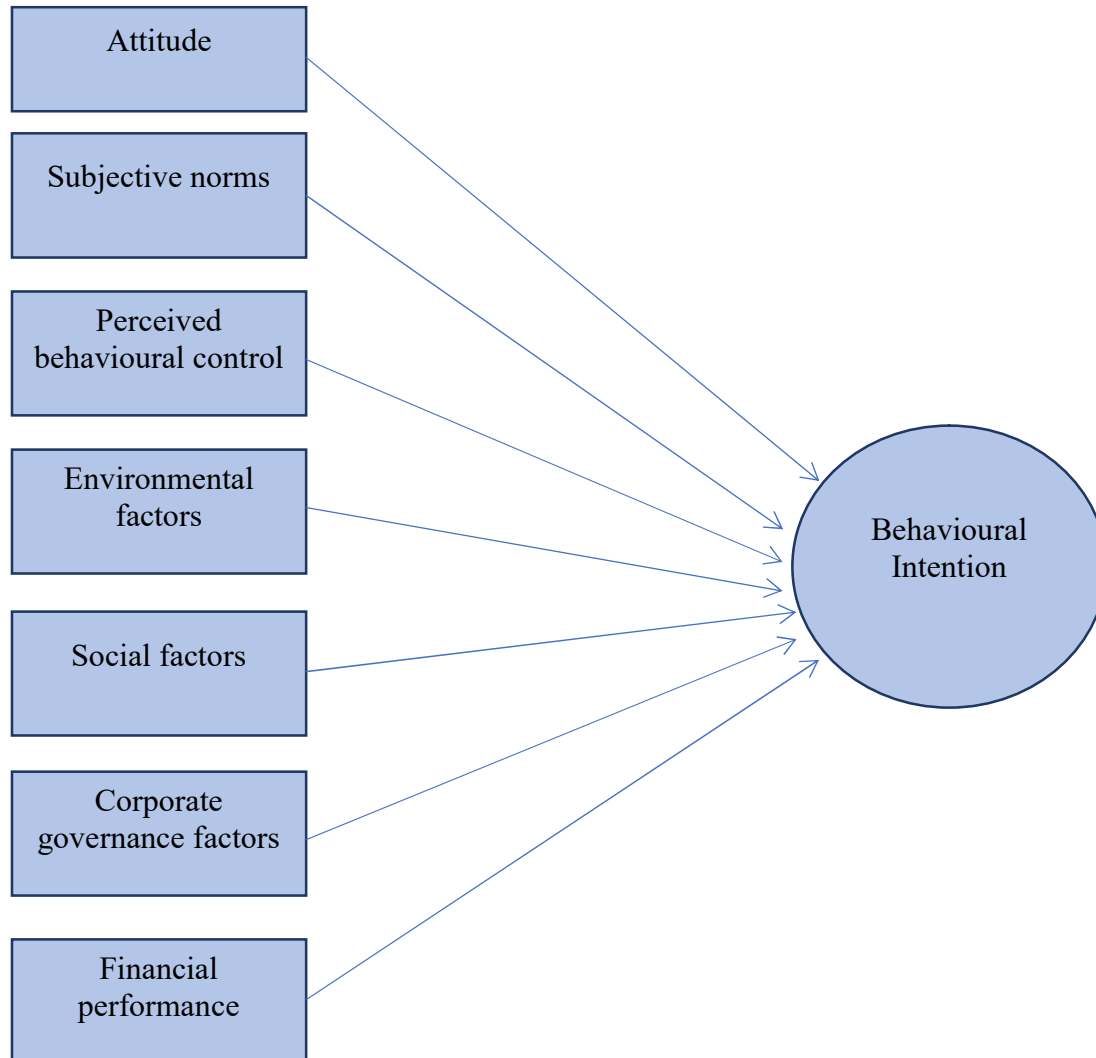


the model, along with other constructs of TPB. Adam and Shauki (2014) extended the TPB model by incorporating the construct of moral norms to investigate the SRI behaviour of investors in Malaysia. The behavioural intention of Generation Y in Malaysia towards SRI is studied by Osman et al. (2020) using the TPB model. The model is extended by adding socially responsible consumption and perceived social obligation constructs. Mehwish et al. (2022) studied the influence of ESG factors on the investment behaviour of individual investors in Pakistan using a deductive TPB-based framework. Jensen et al. (2016) extended the TPB model by including perceived consumer effectiveness and perceived risk to evaluate the factors that influence the intention of Generation Y towards SRI. Yew et al. (2019) examined the influence of environmental concerns, perceived consumer effectiveness, attitude and return on behavioural intention to invest in SRI. Thanki et al. (2022) evaluated the influence of TPB constructs on intention to invest in SRI.

On the other hand, Raut et al. (2021) applied the Theory of Reasoned Action to examine the individual investors' intention to invest in SRI in India. The authors extended the Theory of Reasoned Action by adding moral norms, environmental concerns, financial literacy and financial performance. Based on the conceptual models and findings of these studies, the present study incorporates four additional constructs along with the original TPB constructs to evaluate the behavioural intention of stock market investors in Kerala towards SRI. The constructs of TPB to study behavioural intention consist of attitude, subjective norms and perceived behavioural control and four additional constructs, namely, environmental factors, social factors, corporate governance factors and financial performance, are incorporated.

### 1.8.6. Conceptual Model of the Study

Figure 1.4 displays the conceptual framework based on the Theory of Planned Behaviour (Ajzen, 1991) used in this study.



*Source: Developed for research*

### 1.8.6.1. Constructs used in the Model

Table 1.5 presents the constructs used in the conceptual model, the number of items under each construct and the references.

**Table 1.5**  
**Constructs used in the Model**

<b>Constructs</b>	<b>No. of items</b>	<b>References</b>
<b>Attitude</b>	5	Yew et al. (2019); Jensen et al. (2016); Raut et al. (2021); Osman et al. (2020); Talha et al. (2016); Hofmann et al. (2005); Ham et al. (2018); Osman et al. (2019); Talha et al. (2012); Paetzold and Busch (2014); Khan and Alam (2019); Talha et al. (2016)
<b>Subjective norms</b>	4	Jensen et al. (2016); Raut et al. (2021); Osman et al. (2020); Talha et al. (2016); Hofmann et al. (2005); Ham et al. (2018); Osman et al. (2019); Talha et al. (2012); Paetzold and Busch (2014); Khan and Alam (2019); Talha et al. (2016)
<b>Perceived behavioural control</b>	4	Jensen et al. (2016); Osman et al. (2020); Talha et al. (2016); Hofmann et al. (2005); Ham et al. (2018); Osman et al. (2019); Talha et al. (2012); Paetzold & Busch (2014); Khan and Alam (2019); Talha et al. (2016)
<b>Environmental factors</b>	9	Yew et al. (2019); Raut et al. (2021); Mehwish et al. (2022); Sultana et al. (2018); Nilsson (2008); Shah (2018)
<b>Social factors</b>	6	Mehwish et al. (2022); Sultana et al. (2018); Nilsson (2008); Shah (2018)
<b>Corporate governance factors</b>	8	Mehwish et al. (2022); Sultana et al. (2018); Shah (2018)
<b>Financial performance</b>	7	Yew et al. (2019); Nilsson (2008); Raut et al. (2021)
<b>Behavioural Intention</b>	5	Yew et al. (2019); Jensen et al. (2016); Osman et al. (2020); Hofmann et al. (2005); Ham et al. (2018); Osman et al. (2019); Talha et al. (2012); Paetzold and Busch (2014); Khan and Alam (2019); Talha et al. (2016)

*Source: Secondary data*

### 1.8.7. Normality of the Collected Data

A normality test is conducted to identify whether the sample has been selected from a normally distributed population. It is very important to test the normality of data before starting any statistical analysis because the types of statistical analysis to be conducted depend on the normality of the data. Parametric statistical procedures can be used only when the data is found to be normally distributed. If the data is non-normal, non-parametric tests should be applied. In this study, the ‘Kolmogorov-Smirnov’ test is used to test the normality of the data. According to the Kolmogorov-Smirnov Test, if the p-value is less than 0.05, the normality assumption should be rejected and the data is considered to be non-normal and if the p-value is greater than 0.05, the data are assumed to be normal.

The following hypothesis is formulated:

**H<sub>0</sub>**: The given data are normal

**H<sub>1</sub>**: The given data are not normal.

The result of the normality test is given below.

**Table 1.6**  
**Results of Kolmogorov-Smirnov Test for Normality**

Constructs/ Variables	N	Normal Parameters		Kolmogorov- Smirnov Z	P Value
		Mean	Std. Deviation		
Awareness on different Aspects of Socially Responsible Investment	564	49.6767	22.01719	0.116	<0.001
Awareness on sustainability-themed Indices	564	49.0780	25.18095	0.135	<0.001
Awareness on sustainability-themed funds	564	45.8739	24.70282	0.147	<0.001

General awareness related to Sustainability	564	48.1028	18.72084	0.102	<0.001
Overall Awareness on Socially Responsible Investment	564	48.1903	17.36820	0.074	<0.001
Investors' perception of risk related to socially responsible investments as compared to conventional investments	564	3.06	0.8322	0.258	<0.001
Attitude	564	75.3617	16.52568	0.103	<0.001
Subjective norms	564	65.1152	18.46063	0.129	<0.001
Perceived behavioural control	564	64.6809	17.16302	0.115	<0.001
Environmental factors	564	71.0244	17.00593	0.070	<0.001
Social factors	564	80.9634	17.26052	0.160	<0.001
Corporate governance factors	564	83.4087	15.88301	0.148	<0.001
Financial performance	564	72.8369	12.48421	0.076	<0.001
Behavioural Intention	564	70.6998	18.51998	0.101	<0.001

*Source: Primary data*

Table 1.6 provides the result of the Kolmogorov-Smirnov Test performed to test the normality of the variables of the study related to the awareness, perception, and behaviour towards socially responsible investment. It is evident from the table that for all the variables included in the study, the p-values are less than 0.05; thus, the null hypothesis is rejected. This implies that the data are non-normal.

### **1.8.8. Reliability of the Measurement Instrument**

Reliability refers to the degree of consistency or dependability of a measurement instrument. Reliability analysis is performed to ensure the internal consistency of the measurement instrument to avoid disagreement within a group of

questions. It is the first step in evaluating a measurement model (Yong et al., 2007). In the present study, Cronbach's alpha is used to test the reliability of the scale. A Cronbach's alpha value of 0.60 or above is considered acceptable and a value of .70 or above is considered to be of strong internal consistency (Cronbach & Meehl, 1955). Table 1.7 illustrates the result of the reliability analysis conducted using Cronbach's Alpha in SPSS.

**Table 1.7**  
**Results of Cronbach's Alpha Test for Reliability**

Constructs	No. of Items	Cronbach's Alpha
Awareness on different aspects of Socially Responsible investment	10	0.930
Awareness on sustainability-themed indices	6	0.951
Aware on sustainability-themed funds	14	0.978
General awareness related to Sustainability	6	0.811
Overall awareness on Socially Responsible Investment	36	0.963
Attitude	5	0.929
Subjective Norms	4	0.886
Perceived behavioural control	4	0.793
Environmental factors	9	0.904
Social factors	6	0.938
Corporate governance factors	8	0.937
Financial performance	7	0.723
Behavioural Intention	5	0.930

*Source: Primary data*

Table 1.7 shows the result of the reliability analysis. The reliability analysis results indicate that all the constructs used in this study to measure the awareness, perception and behaviour of stock market investors have good internal consistency,

with Cronbach's Alpha values above .07. This implies that the scale used in the study is reliable.

### **1.8.9. Validation of the Measurement Instrument**

Validity refers to the accuracy of the measurement model. A measurement instrument is valid when it accurately reflects its intended purpose (Field, 2009). There are various forms of validity, including Content Validity, Face Validity, and Construct Validity (Berelson, 1952).

#### **1.8.9.1. Content validity**

Content validity ensures the coverage of the full range of constructs by the measurement instrument (Field, 2009). A measurement instrument possesses content validity if it reflects the content universe of the subject area. It includes all relevant variables and excludes irrelevant ones (Taherdoost, 2016). To ensure the content validity of the research instrument, the researcher conducted an extensive literature review to extract all relevant items and sent the measurement instrument to the experts in the same field of the research.

#### **1.8.9.2. Face Validity**

Face validity is the subjective judgment of a measurement instrument by non-experts. It is an assessment of the practicality, understandability, lucidity of language and clarity of presentation of the measurement instrument by individuals without expertise or non-specialists. It is the least robust form of validity (Taherdoost, 2016). The success of the assessment of face validity depends entirely on the knowledge and expertise of the assessor (Nwana, 2007, as cited in Mohajan, 2017). The researcher has taken measures to ensure the face validity of the measurement instrument by having discussions with various individuals in the relevant research area.

#### **1.8.9.3. Construct Validity**

Construct validity is the statistical validity of the model and is established when there is convergent and discriminant validity (Campbell & Fiske, 1959). Construct validity is crucial for testing hypotheses and empirical measures (Mohajan, 2017).

### **1.8.9.3.1. Convergent validity**

Convergent validity refers to factors converging to represent the underlying construct. The AVE (average variance extracted) is used to measure the convergent validity of the construct. When the AVE value exceeds or exceeds the recommended value of 0.50, items converge to measure the underlying construct and establish convergent validity (Fornell & Larcker, 1981). In this study, the statistics show that all the constructs have an AVE value greater than 0.5; hence, convergent validity is established.

### **1.8.9.3.2. Discriminant Validity**

Discriminant validity establishes the distinctiveness of the construct or the individuality or individual identity of the construct. In this study, the discriminant validity is measured using the two most widely used methods: Fornell & Larcker criterion and HTMT (Heterotrait–Monotrait Ratio).

#### **1.8.9.3.2.a. Fornell & Larcker Criterion**

According to Fornell and Larcker (1981) criterion, discriminant validity is established when the square root of the AVE of a construct is greater than its correlation with all other constructs. In this study, it was found to be established.

#### **1.8.9.3.2.b. HTMT (Heterotrait–Monotrait Ratio)**

Discriminant validity is also established using the HTMT ratio when the values of correlations are below the threshold of 0.85 (Henseler et al., 2015). In the present study, all the constructs fulfilled this criterion and the discriminant validity was established.

## **1.9. Period of the Study**

The data collection for the Survey among stock market investors was conducted during the period from June 2021 to November 2021.



## **1.10. Tools for Analysis**

The data was gathered from both primary and secondary sources. The primary data collected from a sample of stock market investors through questionnaires were tabulated and analysed using the Statistical Packages for Social Sciences (IBM SPSS Statistics version 26). The statistical techniques applied for analysis include Mean, Standard deviation, Percentages, Friedman test and Kruskal-Wallis H test. The behavioural intention towards socially responsible investment was studied using Partial Least Square SEM (path model analysis with smartPLS (version 4)).

The performance analysis of social responsibility-themed mutual funds and socially responsible thematic indices using secondary data was analysed with Compounded Annual returns (CAGR), Risk-adjusted return measures such as Sharpe Ratio and Treynor ratio and Jensen's Alpha. The analysis also includes Spearman rank correlation and repeated measure ANOVA.

## **1.11. Conceptual Clarifications and Operational Definitions**

### **1.11.a. Investor**

An investor is any person who has a Demat account and commits capital to direct equity, mutual funds, or systematic investment plans (SIP).

### **1.11.b. Awareness**

Awareness refers to awareness of investors on different aspects of socially responsible investment, awareness on sustainability-themed indices and funds and general awareness on sustainability.

### **1.11.c. Perception**

Perception of SRI refers to investors' opinion on the integration of social responsibility into stock market investment, their preference and non-preference for SRI, their interest in investment in sin stocks like alcohol, tobacco, weapons or pesticides, and the SRI strategies preferred by the investors and other related items.

#### **1.11.d. Attitude**

Attitude here refers to the favourability or un-favourability of investors towards socially responsible investment. Attitude in general is the opinions or self-perceptions regarding a particular behaviour. It is a hypothetical construct which can be directly observed. Attitude is assessed through measurable responses. It is favourable or unfavourable to a particular concept, object, event or person (Ajzen, 2006). The Theory of Reasoned Action (TRA) deals with attitude towards the behaviour rather than object, event or person (Ajzen, 1985). Attitude is a personal factor in determining behavioural intention; it is the personal evaluation or appraisal of the subject matter.

#### **1.11.e. Subjective norms**

Subjective Norms refer to the opinions or perspectives of others regarding socially responsible investment. It is the opinions or perspectives of others regarding a particular behaviour, that is external viewpoints about a behaviour. It is a social factor; the social pressure to engage or refrain from certain behaviour. Subjective norms are the perceived prescriptions (Ajzen, 1985).

#### **1.11.f. Perceived behavioural control**

Perceived behavioural control refers to the perceived ease or difficulty of investing in socially responsible investments. It is the self-efficacy towards the behaviour. It is the perceived ease or difficulty of performing a particular behaviour. The resources and opportunities to perform the behaviour and difficulties may hinder the performance of the behaviour. It is the opportunities and obstacles to practical behaviour (Ajzen, 1991).

#### **1.11.g. Environmental factors**

Environmental factors refer to investors' opinions on the role of companies towards the environment. It encompasses their opinions on companies' environmental management systems, their interest in eco-friendly products, technologies, renewable energy sources, product innovation and their inclination to invest in environmentally friendly companies.

### **1.11.h. Social factors**

Social factors refer to investors' opinions on the role of companies towards society, and they include opinions on corporate social behaviour, such as charitable donations, human rights, non-discrimination, and a healthy and safe workplace.

### **1.11.i. Corporate governance factors**

Corporate governance factors refer to the importance that investors give to the corporate governance parameters of companies. The corporate governance factors encompass investors' opinions on the rights of shareholders, accountability, transparency, code of conduct, auditing practices, voting rights, and stakeholder engagement and feedback systems.

### **1.11.j. Financial performance**

Financial performance encompasses investors' perspectives on various aspects of socially responsible investment (SRI). This includes their opinions on returns from SRI, expectations regarding the financial outcomes of SRI, comparisons of the performance of SRI funds to non-SRI funds, and opinions on the incorporation of social responsibility criteria into their investment.

### **1.11.k. Behavioural intention**

Behavioural intention refers to the willingness or intention of investors to invest in socially responsible investments. Behavioural intention is the central element in the Theory of Planned Behaviour. It is the willingness to perform a particular behaviour or the effort individuals are willing to take to perform the behaviour. The intention largely influences behaviour. The greater the intention, the stronger the chance to perform the behaviour. Actions are controlled by intention and intention may lead to action. Behavioural intention is the immediate antecedent of behaviour (Ajzen, 1985). (In this report, the terms intention and behavioural intention are used interchangeably).

### **1.12. Limitations of the Study**

The study suffers from the following limitations:

1. Non-probability sampling, namely purposive sampling, was used in this study to collect data. Despite the efforts made by the researcher, the number and list of stock market investors were unavailable, and the concerned authorities and stock broking firms were unwilling to provide the list of investors.
2. The study was confined to individual stock market investors, and institutional investors' awareness, perception and behaviour were not considered.
3. Since the concept of socially responsible is new, the respondents' opinions may not be free from response errors.

### **1.13. Ethical Considerations**

The researcher carried out all the research work ethically. The research was conducted after an extensive literature review, during which variables were identified. Proper citations were provided for the authors' names and sources from which data were collected in the thesis. The measurement instrument's reliability has been verified and upheld. Data collection took place in three randomly selected districts. The study's methodology was presented and approved by the Research Advisory Committee, comprising a University Nominee and internal and external experts periodically. Detailed information about the purpose of the research was communicated to the respondents.

The researcher provided contact details to the participants to address any concerns related to their participation in the research. The researcher took proper measures to ensure privacy, confidentiality, and secure storage of the collected data. The Human Research Ethics Committee of Vimala College (Autonomous), Thrissur, Kerala, reviewed and evaluated the ethical suitability of the research undertaken by the researcher and issued the certificate for the same (refer to Appendix II).

## **1.14. Chapter Design of the Thesis**

The report of the entire study is presented in seven chapters.

### **Chapter 1: Introduction and Research Methodology**

The first chapter begins with an introduction to socially responsible investment, followed by SRI from a global perspective and SRI from an Indian perspective. It also covers the research problem, research gap, significance of the study, objectives, research hypotheses, and scope of the study. Also, it discusses complete details of research methodology, limitations of the study and ethical considerations.

### **Chapter 2: Review of Literature**

Earlier studies in the field of performance of socially responsible investment, awareness and perception towards SRI and socially responsible investment behaviours are discussed in this section. Both national and international research studies are thoroughly reviewed and presented in the chapter.

### **Chapter 3: Theoretical Framework**

This chapter covers the theoretical aspects of socially responsible investment. It includes the evolution of SRI, its concept, definition, types of SRI, strategies of SRI, ESG rating, sustainability-themed indices, underlying theories of SRI and regulatory framework of SRI.

### **Chapter 4: Comparison of Performance of Socially Responsible Portfolios and Market Portfolios**

This chapter deals with the comparative performance analysis of socially responsible portfolios comprising various mutual fund schemes and socially responsible thematic indices. Also include comparative performance analysis of socially responsible portfolios with market portfolios.

## **Chapter 5: Data Analysis**

This chapter presents the data analysis report of a sample survey conducted among stock market investors in Kerala. The chapter starts with the respondents' demographic profile, followed by information related to their participation in the stock market. The next part contains the analysis of the awareness and perception of investors towards socially responsible investment. The last section deals with factors influencing the behavioural intention of investors towards SRI.

## **Chapter 6: Findings, Conclusion and Suggestions**

This chapter provides the major findings of the study, conclusions, suggestions and expected implications.

## **Chapter 7: Recommendations and Scope for Further Research**

The last chapter of this report deals with significant recommendations of the study and the scope for further research.

## References

- Adam, A. A., & Shauki, E. R. (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production*, *80*, 224–240. <https://doi.org/10.1016/j.jclepro.2014.05.075>
- Agyapong, D., & Ewusi, M. (2017). Perceptions about Social Responsible Investing among Academic Staff: Evidence from the University of Cape Coast, Ghana. *Advances in Research*, *10*(2), 1–17. <https://doi.org/10.9734/AIR/2017/33420>
- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control* (pp. 11–39). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2005). *Attitudes, Personality, and Behavior* (2nd ed.). Open University Press.
- Ajzen, I. (2006). *Constructing a Theory of Planned Behavior Questionnaire*. Technical Report. <https://www.researchgate.net/publication/235913732>
- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2021). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemiae Meridionalis*, *24*(3), 95–106. <https://doi.org/10.32725/acta.2021.014>
- Badía, G., Cortez, M. C., & Ferruz, L. (2020). Socially responsible investing worldwide: Do markets value corporate social responsibility?. *Corporate Social Responsibility and Environmental Management*, *27*(6), 2751–2764.
- Badía, G., Ferruz, L., & Cortez, M. C. (2021). The performance of social responsible investing from retail investors' perspective: international evidence. *International Journal of Finance & Economics*, *26*(4), 6074–6088. <https://doi.org/10.1002/ijfe.2109>
- Barom, M. N. (2013). *An Analysis of Social Responsibility Dimension in Islamic Investment Funds: Evidence from Malaysian Investors* [Doctoral Thesis, Durham University]. Durham E-Theses Online: <http://etheses.dur.ac.uk/7001/>
- Barreda-Tarrazona, I., Matallín-Sáez, J. C., & Balaguer-Franch, M. R. (2011). Measuring Investors' Socially Responsible Preferences in Mutual Funds. *Journal of Business Ethics*, *103*(2), 305–330. <https://doi.org/10.1007/s10551-011-0868-z>
- Berelson, B. (1952). *Content analysis in communication research*.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*, 81–105.
- Chakrabarty, B., Lee, S. B., & Singh, N. (2017). Doing good while making money: Individual investor participation in socially responsible corporations. *Management Decision*, *55*(8), 1645–1659. <https://doi.org/10.1108/MD-01-2017-0005>
- Chelawat, H., & Trivedi, I. V. (2016). The business value of ESG performance: The Indian context. *Asian Journal of Business Ethics*, *5*(1–2), 195–210. <https://doi.org/10.1007/s13520-016-0064-4>

- Chhetri, R., & Sharma, D. (2022). A Study on the Level of Awareness and Perception of Investors Regarding Socially Responsible Investing in Sikkim. *East Asian Journal of Multidisciplinary Research (EAJMR)*, 1(10), 2041-2052. <https://doi.org/10.55927/eajmr.v1i10.1381>
- Chowdhury, M. A. F., & Masih, M. (2015). *Socially responsible investment and Shariah-compliant investment compared: Can investors benefit from diversification? An ARDL approach*. <https://mpa.ub.uni-muenchen.de/65828/>
- cKinetics. (2018). *Cracking the Conundrum*.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-302.
- Dalal, K. K., & Thaker, N. (2019). *ESG and Corporate Financial Performance: A Panel Study of Indian Companies*.
- Escrig-Olmedo, E., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2013). Sustainable Development and the Financial System: Society's Perceptions About Socially Responsible Investing. *Business Strategy and the Environment*, 22(6), 410–428. <https://doi.org/10.1002/bse.1755>
- Ferraro, F. (n.d.). *Why Do People Invest in ESG Funds?*
- Field, A. (2012). *Discovering statistics using SPSS: And sex and drugs and rock'n'roll* (3. ed., repr). Sage.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Gill, A., & Mathur, N. (2018). Religious beliefs and the promotion of socially responsible entrepreneurship in the Indian agribusiness industry. *Journal of Agribusiness in Developing and Emerging Economies*, 8(1), 201–218. <https://doi.org/10.1108/JADEE-09-2015-0045>
- Global Sustainable Investment Alliance. (2018). *Global Sustainable Investment Review*.
- Global Sustainable Investment Alliance. (2020). *Global Sustainable Investment Review*.
- Ham, M. (2018). *Applying the Theory of Planned Behaviour in Predicting the Intention to Implement Corporate Social Responsibility*.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hofmann, E., Hoelzl, E., & Kirchler, E. (2005). *Ethical investment: How do moral considerations influence investment behaviour?*
- Ioannou, I., & Serafeim, G. (2015). The impact of corporate social responsibility on investment recommendations: Analysts' perceptions and shifting institutional logics: CSR and Investment Recommendations. *Strategic Management Journal*, 36(7), 1053–1081. <https://doi.org/10.1002/smj.2268>



- Jain, D., & Singh, D. A. (n.d.). *Modelling on Behaviour of Indian Investor Towards Responsible Investing Using ISM*.
- Jansson, M., & Biel, A. (2014). Investment Institutions' Beliefs About and Attitudes Toward Socially Responsible Investment (SRI): A Comparison Between SRI and Non-SRI Management. *Sustainable Development*, 22(1), 33–41. <https://doi.org/10.1002/sd.523>
- Jasuja, D., Prosad, J. M., & Nautiyal, N. (2021). A Comparative Performance Analysis of Sustainability Themed Indices in India: Markov Regime Switching Approach. *Sage Journals*. <https://doi.org/10.1177/23197145211052805>
- Jensen, C., Sandberg, P., & Huynh, R. (2016). "Doing good while doing well": An investigation of Generation Y's intention to invest socially responsibly.
- Jo, H., & Harjoto, M. A. (2012). The Causal Effect of Corporate Governance on Corporate Social Responsibility. *Journal of Business Ethics*, 106(1), 53–72. <https://doi.org/10.1007/s10551-011-1052-1>
- Jonwall, R., Gupta, S., & Pahuja, S. (2022). Socially responsible investment behavior: a study of individual investors from India. *Review of Behavioral Finance*, 15 (6), 865-888. <https://doi.org/10.1108/RBF-05-2021-0099>
- Jun, H. (2013). Investing Well by Investing for Good?: Exploring the Motivations of Socially Responsible Investors. *International Studies Review*, 14(1), 29-56.
- Khan, A., & Alam, A. S. (2019). Retail Investors' Attitude towards Socially Responsible Investment (SRI) in India: Examining the Role of Religiosity and Moral Norms within TPB Framework. *International Journal of Advanced Science and Technology*, 28(7), 224-238. ISSN: 2005-4238.
- Khan, F. I. (2022). Exploring socially responsible investment in Pakistan. *Perspectives*, 30, 1-6. Centre for Strategic and Contemporary Research.
- Knoll, M. S. (2002). Ethical Screening in Modern Financial Markets: The Conflicting Claims Underlying Socially Responsible Investment. *The Business Lawyer*, 57(2), 681-726.
- KSIDC. (2022). Kerala to be the hub of responsible investment. *On Industry and Investment Promotion*, 1(1).
- Leys, J., Vandekerckhove, W., & Van Liedekerke, L. (2009). A Puzzle in SRI: The Investor and the Judge. *Journal of Business Ethics*, 84(2), 221–235. <https://doi.org/10.1007/s10551-008-9705-4>
- Louche, C. (2009). Corporate Social Responsibility: The Investor's Perspective. In S. O. Idowu & W. Leal Filho (Eds.), *Professionals' Perspectives of Corporate Social Responsibility* (pp. 211–231). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-02630-0\\_12](https://doi.org/10.1007/978-3-642-02630-0_12)
- Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review*, 32(3), 817–835. <https://doi.org/10.5465/amr.2007.25275676>
- Miralles-Quirós, M. D. M., & Miralles-Quirós, J. L. (2017). Improving Diversification Opportunities for Socially Responsible Investors. *Journal of Business Ethics*, 140(2), 339–351. <https://doi.org/10.1007/s10551-015-2691-4>

- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spuru Haret University. Economic Series*, 17(4), 59–82. <https://doi.org/10.26458/1746>
- Nagpal, A., & Chadha, M. (2021). Investing in SRI Mutual Funds – An initiative to Sustainable development (General perspective of Delhi/NCR Investors). *Journal of Contemporary Issues in Business and Government*, 27(1), 2241-2250. <https://cibg.org.au/>
- Narayanan, E. A., & Sirigauri, N. (n.d.). *ESG Investing in India*.
- Nilsson, J. (2008). Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior. *Journal of Business Ethics*, 83(2), 307–325. <https://doi.org/10.1007/s10551-007-9621-z>
- Norup, A., & Gottlieb, M. (2011). *Socially Responsible Investing: An assessment of the concept on the Danish market* [Master thesis, Copenhagen Business School].
- Osman, I., Ma'in, M., Muda, R., Husni, N. S. A., Alwi, S. F. S., & Hassan, F. (2019). Determinants of behavioural intention towards green investments: The perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16-38. <https://www.researchgate.net/publication/342656095>
- Osman, I., Subramaniam, G., Mohamad, S., Hanif, A., Hassan, F., & Yaakob, S. (2020). The Adoption of Socially Responsible Investments: Gen-Y Perspectives. *Malaysian Journal of Consumer and Family Economics*, 194-222.
- Paetzold, F., & Busch, T. (2014). Unleashing the Powerful Few: Sustainable Investing Behaviour of Wealthy Private Investors. *Organization & Environment*, 27(4), 347–367. <https://doi.org/10.1177/1086026614555991>
- Pancholi, G., Pancholi, M., & Saxena, A. (2022). ESG investing: Aligning sustainability with investments. *The Management Accountant*, 47-49.
- Pastakia, A. (2014). *Socially Responsible Business in India and the Asia-Pacific: Meeting the Challenges of Inclusive Sustainable Development*. (Working Paper No. CREED/2014/02, Nov.).
- Principles for Responsible Investment (n.d.). *An Introduction to Responsible Investment*.
- Principles for Responsible Investment (n.d.). *What is responsible investment?*
- Puaschunder, J. M. (2016). On the emergence, current state, and future perspectives of Socially Responsible Investment (SRI). *The Journal of Sustainable Development*, 16(1), 38-63.
- Raut, R. K., Das, N., & Kumar, R. (2018). Extending the Theory of Planned Behaviour: Impact of Past Behavioural Biases on the Investment Decision of Indian Investors. *Asian Journal of Business and Accounting*, 11(1), 265–291. <https://doi.org/10.22452/ajba.vol11no1.9>
- Raut, R. K., Kumar, R., & Das, N. (2021). Individual investors' intention towards SRI in India: An implementation of the theory of reasoned action. *Social Responsibility Journal*, 17(7), 877–896. <https://doi.org/10.1108/SRJ-02-2018-0052>

- Reka, R. B. (2017). A study on perception towards socially responsible investment behaviour among retail investors in Chennai. *International Journal of Management and Social Science Research Review*, 1(37), 207-209.
- Samant, M. D., & Singh, R. S. P. (2022). Post Covid Surge in ESG Mutual Funds in India: Is it A Structural Break? *Journal of Positive School Psychology*, 6(8), 600-609. <http://journalppw.com>
- Sarang, G. K. (2021). *Resurgence of ESG Investments in India: Toward a Sustainable Economy*. Asian Development Bank Institute. ADBI Working Paper Series No. 1284.
- Schepers, D. H., & Prakash Sethi, S. (2003). Bridging the Gap Between the Promise and Performance of Socially Responsible Funds: Do Socially Responsible Funds Actually Deliver What They Promise? *Business and Society Review*, 108(1), 11–32. <https://doi.org/10.1111/1467-8594.00006x>
- Shah, M. S. (2018). A Study of Essence of Socially Responsible Investment and Environmental, Social and Governance (ESG)-linked Investment Market in India. *International Journal for Research Trends and Innovation*, 3(8), 215-219.
- Siddiqui, A. U. (2018). The Demography of Socially Responsible Investors across Countries and Time: A Systematic Review. *Asian Journal of Managerial Science*, 7(2), 7–15. <https://doi.org/10.51983/ajms-2018.7.2.1330>
- Singh, M., Mittal, M., Mehta, P., & Singla, H. (2020). Personal values as drivers of socially responsible investments: a moderation analysis. *Review of Behavioral Finance*, 13(5), 543-565. <https://doi.org/10.1108/RBF-04-2020-0066>
- Singhal, C. (2021). A Study on ESG Investments and Millennial Investors in India. *International Journal of Creative Research Thoughts (IJCRT)*, 9(6), d681-d685. [www.ijcrt.org](http://www.ijcrt.org)
- Sinha, R., & Datta, M. (2019). Institutional Investments and Responsible Investing. In M. Ziolo & B. S. Sergi (Eds.), *Financing Sustainable Development*, 127–168. Springer International Publishing. [https://doi.org/10.1007/978-3-030-16522-2\\_6](https://doi.org/10.1007/978-3-030-16522-2_6)
- Social Investment Forum. (2006). *Report on Socially Responsible Investing Trends in the United States: 10-Year Review*.
- Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2022). Did ESG portfolio augment investors' wealth during Covid-19? Evidence from Indian stock market. *Sustainability Accounting Management and Policy Journal*, 14(2). <https://doi.org/10.1108/SAMPJ-02-2022-0087>
- Sorrosal-Forradas, M.-T., Barberà-Mariné, M.-G., Fabregat-Aibar, L., & Li, X. (2023). A new rating of sustainability based on the Morningstar Sustainability Rating. *European Research on Management and Business Economics*, 29(1), 100208. <https://doi.org/10.1016/j.iedeen.2022.100208>
- Sparkes, R. (2002). *Socially Responsible Investment: A Global Revolution*. John Wiley & Sons, Ltd.
- Stakeholders Empowerment Services (SES). (n.d.). *ESG Scores - Top 100 Listed Companies in India: ESG Research Report*.

- Sudha, S. (2015). Risk-return and Volatility analysis of Sustainability Index in India. *Environment, development and sustainability*, 17, 1329-1342.
- Sue, V. M., & Ritter, L. A. (2012). *Conducting Online Surveys*. Sage Publications, Inc.
- Sultana, S., Zulkifli, N., & Zainal, D. (2018). Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. *Sustainability*, 10(6), 1-19. <https://doi.org/10.3390/su10061831>
- Sun, M., Nagata, K., & Onoda, H. (2011). The Investigation of the Current Status of Socially Responsible Investment Indices. *Journal of Economics and International Finance*, 3(13), 676-684.
- Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3205040>
- Talha, M., Abdullah Salim, A. S. A., Ismail, H., & Anantharaman, R. N. (2016). Sensitivity of Socially Responsible Investment Behavior to Gender. *I J A B E R*, 14(3), 1587-1604.
- Talha, M., Salim, A. S. A., Jalil, A. A. A., & Yatim, N. M. (2020). Sensitivity of Socially Responsible Investment Behaviour to Experience and Size of Funds. *The Journal of Applied Business Research*, 36(2), 77-90.
- Talha, M., Salim, A. S. A., Masoud, S. B., & Abu Said, A.-M. (2012). Explaining SRI behaviour of Malaysian unit trust fund managers using theory of planned behavior. *Corporate Ownership and Control*, 9(4), 108–117. <https://doi.org/10.22495/cocv9i4art8>
- Thanki, H., Shah, S., Rathod, H. S., Oza, A. D., & Burduhos-Nergis, D. D. (2022). I Am Ready to Invest in Socially Responsible Investments (SRI) Options Only If the Returns Are Not Compromised: Individual Investors' Intentions toward SRI. *Sustainability*, 14(18), 11377. <https://doi.org/10.3390/su141811377>
- Tripathi, V., & Bhandari, V. (2015). Socially responsible stocks: A boon for investors in India. *Journal of Advances in Management Research*, 12(2), 209–225. <https://doi.org/10.1108/JAMR-03-2014-0021>
- Vandekerckhove, W., Leys, J., & Van Braeckel, D. (2007). That's not what happened and it's not my fault anyway! An exploration of management attitudes towards SRI-shareholder engagement. *Business Ethics: A European Review*, 16(4), 403–418. <https://doi.org/10.1111/j.1467-8608.2007.00512.x>
- Vyas, V., Mehta, K., & Sharma, R. (2020). Investigating socially responsible investing behaviour of Indian investors using structural equation modelling. *Journal of Sustainable Finance & Investment*, 12(2). <https://doi.org/10.1080/20430795.2020.1790958>
- Yen, M., Shiu, Y., & Wang, C. (2019). Socially responsible investment returns and news: Evidence from Asia. *Corporate Social Responsibility and Environmental Management*, 26(6), 1565–1578. <https://doi.org/10.1002/csr.1833>
- Yew, C. M., Ni, L. K., Sin, L. P., & Chen, Y. P. (2019). *Factors that Affect Investor's Intention to Invest in Social Responsibility Investment (SRI)* [Bachelor of Finance (HONS) Project, Universiti Tunku Abdul Rahman].

Yong, T., Ma, S.-h., & Gong, F.-m. (2007). *Empirical Study on Impact of Logistics Operations Capability on Supply Chain Performance*.

### **Websites**

<https://seekingalpha.com>

<https://stats.unctad.org>

<https://www.businessinsider.in>

<https://www.cnbctv18.com>

<https://www.financialexpress.com>

<https://www.marketexpress.in>

<https://www.sebi.gov.in>

<https://www.sebi.gov.in>

<https://www.unpri.org>

**CHAPTER 2**  
**REVIEW OF LITERATURE**

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### **REVIEW OF LITERATURE**

#### **2.1. Introduction**

This present study aims to investigate investors' awareness, perception, and behavioural intentions regarding socially responsible investment. The performance of various socially responsible indices, funds, and sustainability-themed financial products is also a crucial aspect of this study. Therefore, in alignment with the study's objectives, a comprehensive review of the existing literature has been undertaken to acquire an in-depth understanding of different facets of socially responsible investment. This includes assessing its growth at national and international levels and identifying research gaps in the field. The collected studies have been categorised into four sections for presentation, which are as follows:

1. Performance of SRI-Global Scenario
2. Performance of SRI-Indian Scenario
3. Awareness and Perception towards SRI
4. Socially Responsible Investment Behaviour

#### **2.2. Performance of SRI-Global Scenario**

**Schröder (2003)** made an in-depth analysis of socially responsible investments (SRI). Jensen's alpha was used as a performance measure to analyse the SRI equity investment funds. The majority of SRI assets, according to the study, performed similarly to their benchmarks. Only a few funds and indices showed relatively poor performance. This difference may be due to the specific risk-return characteristics of SRI funds and indices.

A sample of socially responsible equity funds in the US, Switzerland, and Germany was compared with conventional funds. On average, these funds do not underperform conventional equities (**Schroder, 2004**).

**Moore (2004)** looked at the risk and returns of products with a focus on sustainability and found that these types of investments can provide a balance of risk and return for the investors. **Geczy et al. (2005)** examined the future of SRI, interviewing experts in the field. Most respondents predict that SRI will lose its niche status and become mainstream.

In his article, **Sethi (2005)** argued that pension funds should invest in socially responsible companies as they are crucial for long-term corporate survival and economic growth. He suggests that research should be conducted to create new measurement standards for SRI.

**Shank et al. (2005)** found that socially responsible mutual funds have similar or slightly lower returns than traditional funds.

**Scholtens (2005)** determined the growth of socially responsible savings and investments in the Netherlands. The study also investigated the financial performance of socially responsible savings and investments. The results indicated no significant difference in the return earned by SRI and its benchmarks. The result also revealed that the SRI risk is slightly higher than its benchmark.

The impact of SRI on financial performance was also examined by **Kempf and Osthoff (2006)**, who concluded that investing in companies with high SRI scores can produce positive abnormal performance without sacrificing financial objectives. The study also revealed that the stocks categorised as socially irresponsible often suffered from declines in performance, whereas socially responsible investments did not encounter such issues.

**Bauer et al. (2006)** examined the performance and risk sensitivities of Canadian ethical mutual funds. The study found that the performance differential between ethical mutual funds and their conventional peers is statistically insignificant.

**Barnett and Salomon (2006)** evaluated the correlation between the financial and social performance of mutual funds that engage in SRI. The study used contemporary stakeholder and portfolio theories to examine 61 SRI funds from 1972 to 2000. It found that when the SRI fund uses more social screens, its financial returns initially decrease but later increase as the number of screens reaches a maximum. The



authors advised fund managers to carefully analyse the impact of their screening procedures on fund performance.

A study by **Bollen (2007)** looked at the patterns of investor money flow in a sample of socially screened equities mutual funds. It is found that socially responsible funds have much lower monthly fund flow volatility than conventional funds, indicating that investors place value in socially responsible funds when profits are favourable.

**Stenström and Thorell (2007)** investigated the performance differences between regular mutual funds and socially responsible investment (SRI) mutual funds. The study found that traditional funds performed better than socially responsible funds. However, they argued that some socially responsible business practices could benefit fund performance and a fund's performance can be enhanced by excluding companies based on norm-based screening.

**Viviers (2007)** evaluated the risk-adjusted performance of local SRI funds in South Africa. Qualitative data was collected from SRI fund managers and industry experts. The performance of local SRI funds was compared with three benchmark categories and analysed using the Sharpe ratio, Sortino ratio, Jensen's alpha, and Upside-potential ratios. Results suggested that local SRI funds underperformed in the first two sub-periods and outperformed in the third sub-period.

**Gil-Bazo et al. (2008)** analysed the financial performance of socially responsible investment (SRI) mutual funds. The study used the matching estimator methodology to obtain the results. The analysis concluded that there was just one instance when costs between SRI and conventional funds varied significantly: SRI funds are less expensive than conventional funds managed by the same management organisation.

**Cortez et al. (2009)** scrutinised the performance of the US and European global SRI funds. They found that while socially conscious funds in the European market performed on par with traditional and socially conscious benchmarks, the US and Austrian funds underperformed due to their exposure to small caps.

**Newell (2009)** created a Socially Responsible Property Investment (SRPI) performance index and found that UK real estate companies actively engaged in SRPI had better risk-adjusted returns than the industry.

**Hassan (2009)** explored the value of Shari'ah-compliant sustainable investing in light of the credit crisis and the disastrous repercussions of climate change. The challenge for Shari'ah-compliant sustainable investment is to replace rather than replicate it, given that the study indicated that Shari'ah-compliant funds outperformed the traditional benchmark.

A study by **Sánchez and Escolano (2010)** focused on the business entities receiving investments from socially responsible investment funds, focusing on businesses listed on the European stock market. The author discovered that the retail market for SRI funds in Spain is growing slowly. The study also looked at the social, economic, environmental, and corporate governance components of these investments. The author stated that calling traditional finance 'non-ethical' or 'anti-ethical' is inaccurate and that traditional banks have been referred to as socially responsible investment funds when they have included environmental, social, and corporate governance concerns in their investing practices. He also noted that while socially responsible investments and ethical financial practices are theoretically similar, SRI procedures are optional and their definitions are too vague and general.

**Chang and Witte (2010)** assessed the fund features, risk, and performance of all the US socially responsible funds available at the time. They found that socially responsible funds have lower returns and worse reward-to-risk ratios. Over the past 15 years, these funds have not produced competitive returns compared to traditional funds.

**Copp et al. (2010)** compared the risk-adjusted return on SRI to traditional investments during economic downturns. They found that SRI had a higher beta risk during such periods than traditional investments.

**Arjalies (2010)** studied the factors driving the increased adoption of SRI in France, the strategies employed by asset management firms, and the impact on equity and fixed-income investments. The research found that a group movement led by asset managers and financial analysts is responsible for mainstreaming SRI and that

SRI is growing more popular in equity investments but slowing down in fixed income.

A study by **Humphrey and Lee (2011)** examined the performance of SRI equity funds in the Australian market. Their findings revealed that the returns of SRI and conventional funds are comparable. Additionally, their analysis suggested that no substantial evidence indicates that a fund's screening level significantly influences its overall performance. However, it was noted that a more significant number of screened funds tend to exhibit improved performance when considering risk factors.

**Rathner (2012)** performed a meta-analysis on the performance of Socially Responsible Investment (SRI) and conventional funds. The meta-regression exhibited that only a small number of research revealed underperformance and outperformance of SRI, whereas 75% of the studies found no performance difference between Socially Responsible Investment (SRI) funds and conventional funds. The majority of the studies focused on US SRI funds.

**Hirschberger et al. (2012)** presented the results of an empirical study concerning conventional and socially responsible mutual funds. The study cannot find strong evidence of differences between conventional and socially responsible mutual funds.

**Chang et al. (2012)** compared the financial performance of green and traditional mutual funds in the USA. 131 green mutual funds were used for the study. Annualised rates of return, expense ratios, and Sharpe ratios are used for the study. The study found that green mutual funds have generated lower returns and similar risks than traditional mutual funds.

**Latinovic and Obradovic (2013)** examined the relationship between corporate social responsibility and shareholder value and the study also found a link between corporate social responsibility and shareholder value.

**Reddy and Bather (2013)** explored the relationship between institutional ownership, corporate governance, and company financial performance. The ordinary Least Squares regression method is used for the analysis. The study found that the top five institutional shareholders are more involved with governance.

In his study, **Wimmer (2013)** found that the scores for environmental, social and governance (ESG) tend to last for only two years in socially responsible mutual funds. This indicates that socially conscious investors cannot rely on strong ESG ratings to persist in the long run. Therefore, it is recommended that these investors diversify their portfolios and carefully screen all their assets.

Similarly, **Utz and Wimmer (2014)** compared conventional mutual funds with socially responsible mutual funds. They found no significant differences between the two types of funds. They also found that the label 'SR mutual fund' does not guarantee the exclusion of unethical companies.

**Ameur and Senanedsch (2014)** used a model to compare sustainability-themed indices to traditional ones and found that sustainable indexes had lower risk premiums.

**Peylo (2014)** thoroughly analysed socially responsible investment (SRI) to contrast it with traditional investment methods. The study sought a framework to put traditional investing and SRI on equal footing regarding rationality. The research found that investors can pursue socially responsible goals without sacrificing performance, as it was based on a literature analysis and verified using historical stock market data. The author suggested that SRI should be implemented in an integrated and rigorous way, allowing investors to achieve personal and practical goals.

**Pinto et al. (2014)** examined the risk-adjusted performance of Brazilian SRI funds with local index funds. They found that SRI funds in Brazil exhibited comparable performance to the broader Brazilian stock market.

Another study by **Chowdhury and Masih (2015)** highlighted that Islamic finance and SRI are the fastest-growing financial sectors over the past 20 years, growing faster than the overall financial market. They used an ARDL bounds testing technique to analyse the performance of two types of limited investment portfolios. They found a negative correlation between socially responsible and Shariah-compliant funds over long and short terms.

**Klein and von Wallis (2015)** reviewed the SRI literature, comparing the performance of SRI vehicles to industry standards and examining the impact of SR behaviour on a company's financial success. They found that SRI funds, on average, outperform traditional investments and that there is a correlation between SRI actions implemented by a company and its financial outcomes.

**Johansson and Brandt (2015)** identified that European ethical mutual funds have less systematic risk exposure and have performed better during crises but underperformed in non-crisis times.

A study by **Junkus and Berry (2015)** used traditional benchmarks to compare the performances and other attributes of SR mutual funds. It noted that the performance of conventional and socially responsible mutual funds did not differ significantly.

**Ko and Kim (2015)** carried out a study in the Korean Securities market to assess how well the companies whose stocks are chosen for SRI funds have performed on the capital market with the help of Tobin's Q. As per their study, these firms outperformed other firms and suggested that socially responsible corporate behaviour could result in great social respect and financial performance.

**Velte (2017)** concentrated on environmental, social, and governance performance and evaluated their impact on financial performance. The study revealed that the ESGP positively impacts ROA but does not impact Tobin's Q.

**Ang and Weber (2018)** analysed the efficiency of SRI in the Korean market. They found that the future price of SRI is not affected by previous prices, suggesting that investors cannot gain abnormal returns by analysing historical data. They also posited that the Korean SRI market is more stable than the Serbian market.

**Atan et al. (2018)** looked into the effects of environmental, social, and governance (ESG) issues on the profitability, market value, and cost of capital of public limited companies (PLCs) in Malaysia. Using data from Bloomberg's ESG database, the researchers analysed a sample of 54 companies over three years from 2010 to 2013. The findings indicated no significant correlation between ESG

variables and profitability or company value. However, the overall impact of ESG factors was found to have a positive effect on the cost of capital for the companies.

**Asvathitanont and Tangjitprom (2020)** assessed the risk and return of ESG investment in Thailand. The authors constructed an ESG-themed portfolio using the positive SRI screening strategy. The return of the ESG portfolio is analysed with the help of the Sharpe ratio, Jensen's Alpha and Modigliani risk-adjusted performance or M2. The results of these measures pointed to a slightly lower performance of the ESG portfolio compared to the benchmark. ESG portfolio displayed lower total risk and systematic risk than the benchmark portfolio in terms of risk.

**Badía et al. (2021)** investigated the performance of sustainability-themed portfolios in four regions: North America, Europe, Japan, and Asia Pacific. They suggested that the SRI screening strategies are different in different regions. It varies over time, and if investors consider these considerations, they can invest in sustainability-themed stocks without sacrificing financial returns.

**Hornuf and Yuksel (2023)** conducted a meta-analysis on the performance of SRI in a global scenario. The authors concluded that, on average, no significant difference is found between SRI and market portfolios.

### **2.3. Performance of SRI-Indian Scenario**

**Sekhar (2011)** focused on various green funds, green investing companies, and green mutual funds in India. The study also intended to draw the attention of mutual fund organisations towards green mutual funds, which are helpful for the safe environment and protection of the earth.

A study by **De and Clayman (2014)** on the relationship between a company's ESG rating and its stock return, volatility, and risk-adjusted return found that businesses with higher ESG ratings had higher returns, lower volatility, and better risk-adjusted returns than those with lower ratings.

**Sudha (2015)** compared the S&P ESG India index with the Nifty and S&P CNX 500 regarding risk-return analysis. The analysis showed that, compared to two broad market proxies, the S&P ESG India index offered investors a higher annualised

return from Jan 2005 to Sep 2012 at a lower (beta) systemic risk. Additionally, no discernible difference was observed between the mean daily returns of the ESG index and market proxies. The findings suggested that ESG investments could offer investors a better return at a lower risk.

**Tripathi and Bhandari (2015)** conducted a performance analysis of two major socially responsible stocks in India: the S&P ESG India index and the S&P BSE GREENEX. They compared these stocks with the NIFTY, SENSEX (general stocks portfolios), and the CNX 500 Equity index (market portfolio). The analysis resulted in a significantly higher performance of socially responsible stocks during both crisis and post-crisis periods. These two highly risky, socially responsible stocks outperformed the market portfolio and general portfolio in terms of return, coefficient of variation, and other risk-return measures. This shows that investors can earn better returns by investing in socially responsible portfolios by limiting the diversification of portfolios. The authors believed that the increased awareness of SRI by the Indian market made the significant and positive performance of socially responsible stocks during the crisis period.

**Chelawat and Trivedi (2016)** posited that the ESG performance of companies can have a favourable impact on their financial performance. The authors investigated the influence of corporate ESG performance on the corporate financial performance of companies in India. The results of ROCE and Tobins Q confirm that strong ESG performance improves the financial performance of companies in India. The authors suggested mandatory ESG reporting of all companies in India, and there should be uniformity in sustainability reporting and disclosures. These may improve financial return and the long-term viability of companies.

**Malla (2017)** noted that although socially responsible investment in India is still in its early stages, it is growing and is expected to gain momentum in the coming years. Governments, companies, and market players are among the stakeholders aiming to incorporate ESG factors into their primary investment plans. According to this study, between October 31, 2014, and October 31, 2017, the S&P BSE indexes showed a consistent increase.

A study by **Chakrabarty et al. (2017)** compared the risk-return characteristics of exchange-traded funds (ETFs) that contain CSR equities to those of the market and found that CSR-focused ETFs outperformed their market indexes, suggesting that individual investors can achieve comparable returns through investment in these ETFs. However, they may not provide shelter during economic downturns.

**Dalal and Thaker (2019)** attempted to evaluate the effect of ESG factors on the performance of companies. The authors conducted a panel study of sixty-five Indian companies listed on the NSE 100 ESG index. The results of analysis by using regression analysis, Tobin's Q, and other profitability-based measures suggested the better financial performance of these firms. They opined that ESG performance positively influences firms' financial return.

**Banu et al. (2021)** stated that the SBI Magnum Equity Mutual Fund assures long-term capital returns to investors. The authors attempted to determine how SBI Magnum Mutual Fund schemes have grown in relation to the industry benchmark indices, namely, the Nifty 100 ESG index. The findings postulate a significant association between the SBI Magnum Mutual Funds indices and its benchmark indices.

**Jasuja et al. (2021)** made a comparative performance analysis of social responsibility-themed indices with the market index. The analysis was made for the period from 1st April 2012 to 31st March 2020 and the National Stock Exchange-based social responsibility indices such as the Nifty100 ESG index and Nifty100 ESG Enhanced index compared with Nifty50. The results of the TGARCH model suggested that the social responsibility-themed indices showed a better performance than the market index. Thus, no significant difference is found in the performance of social responsibility-themed indices and the market index.

**Akhileshwari et al. (2021)** conducted a study on various ESG-themed mutual funds in India, and the authors also forecasted the NAV of these ESG-themed mutual funds using ARIMA. It is concluded that ESG mutual funds yielded a 28.1% overall average growth rate as of the 1st of September 2021 and a 51.4 % average predicted growth rate for the next year.



**Jain and Mehrotra (2021)** made a comparative performance analysis of the Nifty100 ESG Index and Nifty100 Enhanced ESG Index with Nifty 50 from 3rd January 2011 to 31st December 2020. The performance is analysed with the help of descriptive statistics and ARCH and GARCH models. The authors found that ESG-themed indices performed at par with the Nifty 50 index, and volatility was also the same for these indices.

**Sharma (2022)** conducted an empirical study on the performance of BSE Greenex during the pre and post-COVID-19 period. The analysis based on the daily closing prices data of BSE Greenex revealed that BSE Greenex outperformed during post COVID-19 period compared to pre COVID-19 period. The author argues that the Covid-19 pandemic led to the integration of sustainability into business practices.

**Sood et al. (2022)** compared high and low ESG portfolios using different risk-adjusted performance measures such as the Sharpe ratio, Treynor ratio and Jensen's alpha. It was found that BSE CARBONEX, BSE GREENEX, and BSE 500 resulted in superior performance before and during the COVID-19 pandemic. The risk of these portfolios also increased during these periods.

**Dhasmana et al. (2023)** explored the relationship between investors' sentiments and the performance of ESG stocks in India by using a sentiment index. The ESG performance of companies in India was measured using the Nifty 100 ESG index and MSCI India ESG Leaders index. The authors found a co-integration between investors' sentiments and the performance of ESG stocks; a better performance of ESG indices weakens the investors' sentiments and vice versa. They also found a lack of interest on the part of the investors in the ESG policies and initiatives of Indian companies.

**Kiran and Tadoori (n.d.)** conducted a study to evaluate the performance of Tata ethical funds. For this, the authors selected four ethical investment-themed Tata funds. According to the analysis using risk-adjusted criteria, Tata's ethical funds achieved returns comparable to market returns. It is also found that the Tata Ethical Dividend Fund outperformed comparable market plans in terms of performance and has a reduced level of systematic risk.

**Daga et al. (n.d.)** have done a comparative study on Indian ESG indices and conventional indices. The study was conducted for four years and used Welch's two-sample T-test, F-test and risk-adjusted measure of Sharpe ratio. The T-test indicated no significant difference between the mean returns of ESG-based indices and their conventional counterparts, and the F-test indicated no significant difference in return volatility between ESG-based indices and their conventional counterparts. The result of the Sharpe ratio indicated a better return of ESG-themed indices compared to the market index of Sensex and Nifty.

## **2.4. Awareness and Perception towards SRI**

**Rosen et al. (1991)** conducted a postal survey of 4,000 investors in two mutual funds that used social screens while making investment decisions. The study found that younger investors and those with higher levels of education were more attracted to SRI investments. Even though the respondents respected socially conscious business practices, they hesitated to sacrifice financial gain to achieve it. According to the findings, female investors were more likely to invest in SRI funds than male investors.

A survey by **Haigh (2008)** found that respondents are interested in social funds and put much effort into researching and monitoring social and environmental issues. They expressed dissatisfaction with the lack of attention given to these issues by fund managers and financial advisors, and the respondents also stressed the need for proper planning and management of socially responsible mutual funds.

**Owen and Qian (2008)** created a model to understand the characteristics and motivations of socially conscious investors. They found that non-financial factors and demographic traits heavily influenced investors' choice of SRI.

A survey was conducted among 120 Polish institutional investors to examine the awareness level of CSR and the importance of ESG factors in investment decision-making. The survey concluded that the majority of the investors believe that there is a positive relationship between CSR initiatives and financial performance. A high awareness rate is found in the relationship between CSR and corporate financial performance. The investors also believe that CSR initiatives can be used as a tool for

minimising risk (**Investment Decisions and Corporate Social Responsibility Survey Report, 2011**).

**Escrig-Olmedo et al. (2013)** undertook a study among the Spanish public to examine their perception of socially responsible investing criteria and real-life investment needs. The study was based on a field survey. It can be concluded from the study that the majority of the socially responsible individual investors included highly educated, middle-aged women with middle and higher incomes. The educational and occupational variables are the most important while making investment decisions for Spanish investors. The study also revealed that the Spanish students were interested in socially responsible investment. The constraints for SRI in Spain were the lack of awareness, non-availability of suitable sustainable indices, and rating agencies. The authors suggest that the government should promote socially responsible investment.

**Murtaza et al. (2013)** came out with a study to analyse the risk perception towards socially responsible investors in Muslim countries. The study identified that demographic factors influence the investment decisions of socially responsible investors in Muslim countries through the mediating variable risk perception. They also found that social factors, such as religion and family influence, directly influence socially responsible investors.

**Barom (2015)** investigated how Islamic fund investors in Malaysia felt about integrating social responsibility concerns into their investment decisions. The author reported a favourable attitude and a positive perception of investors towards integrating social responsibility consideration into investment decisions. It is confirmed that both financial motives and normative motives influenced investors' commitment to integrating social responsibility into investments along with socio-demographic variables such as age, income, education, occupation, ethnicity, and organisation.

**Dorfleitner and Sebastian (2014)** studied the motivations of German-speaking investors who choose to invest socially responsibly. They found that higher education levels and gender influenced the interest in SRI, and respondents with significant investment volumes were more likely to invest in companies that upheld ethical standards.

According to a study by **De Zwaan et al. (2015)**, most members of superannuation funds are unaware of the environmental, social, and governance (ESG) strategies used by their funds. Despite being interested in ESG investment and superannuation, these members have little knowledge about the ESG approach used by their fund and do not believe it carries any monetary costs.

**Marti (2015)** looked at how investors respond to the ethical screening of pension fund managers. The study found that investors prefer traditional or solidarity pension plans over ethical pension schemes. Due to a lack of knowledge, investors invest less in ethical pension plans than in standard and solidarity pension funds. The author suggested that management organisations should make their CSR investments more transparent to persuade investors to invest in morally sound products.

**Dorfleitner and Nguyen (2016)** conducted a global study on the best percentage of private investments that should be allocated to SRI. They found that investors who invest more often are typically content, with a lower proportion of their portfolio allocated to SRI. In comparison, women and younger people tend to seek out a greater proportion of sustainable investments.

**Apostolakis et al. (2016)** looked at the perspectives of pension beneficiaries and fund managers toward responsible investing. They found that members were more supportive of responsible investment than management and that different ideas and concerns about retirement-related issues drive the differing attitudes towards responsible investing.

**Wiesel et al. (2016)** examined how social preferences may explain engagement in socially responsible investing (SRI) through three indicators: interest in SRI, history of SRI, and the current percentage invested in SRI. Using an online survey of US investors, the authors found that those with stronger social preferences had a greater interest in SRI, according to an online survey of US investors. Additionally, no correlation was found between social preferences and the percentage of overall portfolios invested in SRI. The differing views and concerns about retirement were found to drive the varying attitudes and preferences of pension fund members and beneficiaries toward responsible investing.

**Dilla et al. (2016)** surveyed non-professional investors online. They found that female investors are more likely to use SRI screening tools than more experienced investors or those with finance or accounting degrees.

**Reka (2017)** studied the perception of retail investors in Chennai towards socially responsible investment. The research revealed that low return anxiety and a lack of SRI awareness discourage retail investors from SRI. According to the findings of the hypothesis test, the respondent's age and gender had no bearing on their choice to invest in SRI.

**Sinha et al. (2020)** evaluated the role of investment bankers in influencing the integration of ESG factors into an investment; for this, they conducted a comparative study of India with European countries. The authors employed an exploratory case study research design for collecting data on the perception of investment bankers. Investment bankers believe that ESG factors can be integrated into traditional financial analysis. A comparison of the Indian economy with European counterparts found that the number of ESG-based investment alternatives is less for the Indian financial market, and the SRI strategies used by Indian institutional investors are limited to negative screening. In contrast, investors in European countries employ a wide range of strategies in incorporating ESG parameters into investment. The European financial market encourages sustainable investment for reducing ESG risks. However, in India, ESG factors are incorporated to increase the reputation of firms, and compared to India, sustainable investment, green banks, and ethical funds develop expeditiously in European countries. They even use these ESG factors as a hedging tool.

**Nagpal and Chadha (2021)** presented the awareness level of investors in India towards SRI-profiled mutual funds and their perception of SRI mutual funds' return and risk characteristics. According to the data, young, highly educated investors in the middle-income bracket strongly prefer SRI mutual funds. Additionally, it was found that investors believe ethical funds to be riskier and more profitable than conventional funds and possibly provide adequate returns.

**Singhal (2021)** researched the awareness, perception, and attitude of millennials and early Gen-Z groups in India regarding ESG investment and the factors influencing ESG investment. He observed that even though this group of respondents had limited knowledge of ESG investment and most were unfamiliar with this concept, they still liked allocating a percentage of their investment to ESG parameters. Climate change, carbon emission, environmental exploitation, and other related issues have attracted investors to ESG investing.

**Chhetri and Sharma (2022)** investigated the awareness and perception of investors in Sikkim about socially responsible investment. The study used a convenience sampling method to select 100 Sikkimese investors. The findings showed that while a sizeable majority of investors were aware of responsible investing, very few had invested in a financial product that was socially responsible. Moral considerations and financial gain were discovered to be the driving forces behind socially responsible investment, and lack of awareness is the main barrier to purchasing socially responsible financial instruments. The analysis also indicated that, in terms of perception, return on investment is the primary consideration when investing in SRI, followed by environmental concerns.

In a study conducted by **Jonwall et al. (2022)**, the Theory of Planned Behaviour was used to investigate Indian investors' awareness of Socially Responsible Investment (SRI), their interest in sustainability-themed investments, the challenges they face when choosing socially responsible investments, and their perception of integrating Environmental, Social, and Governance (ESG) issues to investment. The study found that Indian investors have a positive attitude towards incorporating ESG issues in their investments, and they are interested in SRI avenues but lack awareness of SRI. Additionally, investors face challenges such as limited access to SRI information, lower returns, lack of liquidity, and no tax incentives.

## **2.5. Socially Responsible Investment Behaviour**

**Hofmann et al. (2005)** conducted experimental research to understand the influence of ethical considerations on investment decisions using a questionnaire and a computer-simulated asset market. The study employed the theory of planned behaviour, multiple attribute utility theory, and issue-contingent model of ethical

decision-making in organisations, and the result showed the considerable effect of moral consideration in the investment decision-making of respondents. The paper has shown that attitude and subjective norms affect intention and thereby significantly influence ethical behaviour.

**Guyatt (2005)** carried out case studies on three institutional investors in the UK to explore the challenges of ethical investing and found that behavioural barriers such as short-termism and a preference for rational decisions can hinder responsible investment.

**Nilsson (2008)** undertook a research to explore the impact of social, environmental, and ethical factors (pro-social influence) on SRI behaviour among SRI-profiled mutual fund investors. The study also addressed the influence of socio-demographic variables and the financial perception of SRI. The study infers that investors incorporate social, environmental, and ethical factors into investment decision-making along with profit. Among the demographic variables, education and gender had the greatest influence on SRI behaviour.

**Iyer and Kashap (2009)** developed seven constructs to study individual attributes affecting socially responsible behaviour. The seven constructs include collectivism, materialism, religiosity, environmental attitude, risk tolerance, and social investing efficacy. Collectivism refers to the influence on the behaviour of individuals by the group they are a part of, materialism refers to the influence of material possessions, religiosity refers to the influence of religious belief on attitude and behaviour, an environmental attitude refers to concern for protecting the natural environment, risk tolerance consists of risk propensity and risk affinity and social investing efficacy refers to the individual investors' belief that they can encourage corporate social performance. They shared their view that investors place greater emphasis on non-financial factors along with financial factors. A series of studies applied these constructs developed by Iyer and Kasyap in different contexts and found significant by different authors (Nair & Ladha, 2014; Vyas et al., 2020; Garg et al., 2022; Thanki et al., 2022; Hanifa & Atmini, 2023)

A study by **Talha et al. (2012)** investigated the socially responsible investment behaviour of unit trust fund managers in Malaysia. The results of the TPB model suggested a positive and significant relationship between attitude and intention, but the variable attitude did not influence the SRI behaviour. A positive and significant influence of subjective norms on SRI behaviour is noted, and a significant but negative relationship between subjective norms and intention is also noted. However, the variable perceived behaviour controls neither influence the intention nor the SRI behaviour.

**Nair and Ladha (2014)** researched the variables influencing the non-economic goals of Indian investors. This study employed the scale developed by Iyer and Kashap (2009), and the results recommended that the non-economic goals of Indian investors are highly influenced by collectivism, risk tolerance, religiosity, and environmental attitude, but not by materialism. It was also found that social investing efficiency acts as a mediator between different investor behaviours and non-economic investment goals.

**Adam and Shauki (2014)** investigated the SRI behaviour of Malaysian investors by employing the theory of planned behaviour by adding moral norms as an explanatory variable. Analysis was done on the relationship between intention and behaviour and the role of intention as a mediating factor on behaviour through attitude, subjective norms, perceived behavioural control, and moral norms. The findings revealed that intention significantly influences behaviour and that focusing solely on intention may result in a more accurate prediction of the behaviour of Malaysian SRI investors. It was also shown that moral norms greatly impacted investors' intentions and behaviour. The intention to invest in SRI was also influenced by attitude and subjective norms but not perceived behavioural control.

Several studies have been made to examine the influence of gender on SRI. **Talha et al. (2016)** explored the behaviour of Malaysian institutional investors towards SRI and the influence of gender on socially responsible investment behaviour. By extending the theory of planned behaviour by adding the variables of moral intensity and caring ethical climate, they concluded that gender moderates SRI behaviour. For female fund managers, gender significantly moderates intention and personal factors, including attitude, subjective norms, and perceived behavioural



control. For male fund managers, gender has a significant moderation effect between intention and organisational factors: intention and caring ethical climate.

**Jensen et al. (2016)** attempted to understand the intention of Generation Y toward socially responsible investment by applying the theory of planned behaviour. The people born between 1981 to 1995 are known as Generation Y. The analysis depicted the positive relationship between Generation Y's subjective norms, perceived behavioural control and perceived consumer effectiveness to invest in SRI, and Generation Y's attitude and perceived risk did not present a significant relation to investing in SRI. The findings also show that Generation Y has a strong intention to invest in SRI, which raises the possibility that SRI may eventually account for a larger market share by Generation Y investors.

**Sultana et al. (2018)** conducted a study to explore the influence of ESG issues on the investment decisions of individual investors in Bangladesh. The theory of planned behaviour, behavioural asset pricing model (BAPM), and goal setting theory (GST) served as the theoretical foundation for the study. The data was collected with the help of both an interview and a questionnaire survey. Analysis depicted that corporate governance issues have the greatest influence on investment decisions, and the investors in Bangladesh give equal importance to environmental and social issues. They give more emphasis on the creation of modern market prospects through technological advancement, proper waste management, eco-friendly products, reduction of carbon emission, safe working environment, the opportunity for career advancement of employees, quality work-life balance, equity and fairness to the employees, efficacious board of directors, disclosures and reporting, independent auditors and audit committee. It was also disclosed that ESG issues and investment decisions are significantly moderated by investment horizon.

**Ham et al. (2018)** expanded the theory of planned behaviour by including the variable CSR in education and delved into the future managers' intention to deploy CSR in their future companies. The survey was conducted among 253 business students. The authors concluded that attitude, subjective norms, and perceived behavioural control significantly affect the intention to incorporate CSR in future business endeavours. It was also found that the additional independent variable, CSR in education, also contributed significantly to the intention.

The concept of integrating environmental aspects into financial analysis is known as green investment. **Osman et al. (2019)** conducted a study focused on motivating factors for Muslims to invest in green investments in Malaysia. The study employed the TPB model and extended the theory by incorporating the variables of knowledge, reputation, and religious values. The empirical results suggested a statistically significant and positive relationship between attitude, perceived behaviour control, reputation, knowledge, and religious values toward the behaviour to invest in green funds. However, it was discovered that subjective norms had no impact on behaviour. Additionally, it is noted that the variable religious values have the most significant impact on the behaviour of Muslims in Malaysia in investing in green funds.

**Khan and Alam (2019)** assessed Indian retail investors' decision-making behaviour related to SRI. Data were gathered from 409 respondents using a structured questionnaire, and they adopted the theory of planned behaviour propounded by Icek Ajzen to comprehend the SRI behaviour. The authors used moral norms and religiosity to study the SRI behaviour in addition to the variables attitude, subjective norms, perceived behavioural control, and intention. They concluded that all the studied variables had a statistically significant influence on Indian retail investors' SRI behaviour. Attitude, subjective norms, and moral norms were the most significant influential factors on SRI behaviour.

Socially responsible behaviours of investors are backed by their financial concerns and social, environmental, and ethical factors. **Yew et al. (2019)** empirically analysed the factors influencing the intention to invest in socially responsible investments. They employed the theory of planned behaviour to understand the motivating factors among Malaysian investors. The results of the study revealed that environmental concern, perceived consumer effectiveness, and attitude towards socially responsible investment are the motivating factors behind SRI among Malaysian investors. These factors had a significant relation with investors' intention to invest in SRI. However, the authors opined that the perception of return was irrelevant in socially responsible investment. The results of the analysis of demographic variables suggested an insignificant relationship between gender, age,

and educational qualification with investors' intention and a significant relationship between income and investors' intention to invest in SRI.

Another similar study carried out by **Osman et al. (2020)** on Gen-Y's intention to invest in socially responsible investment in Malaysia. The authors used the extended theory of planned behaviour by adding the variables of socially responsible consumption and moral obligation. Based on the survey results, a significant relationship was found between all variables with intention to adopt SRI except subjective norms and intention to invest in SRI.

To empirically investigate individual investors' intention to invest in socially responsible investments in India, **Raut et al. (2018)** employed the theory of reasoned action. Four variables, including environmental concern, financial performance, financial literacy, and moral norms, were added to attitude and subjective norms to analyse the underlying intention to invest in SRI. The data collected from investors residing in Patna, Ranchi, and Kolkata resulted in a positive and significant relationship between attitude, subjective norms, financial performance, financial literacy, and financial performance on the intention to invest in SRI. However, there is no correlation between environmental concern and intention to invest in SRI. The study highlighted that, compared to other variables, financial performance had the most significant influence and coefficient on intention to invest in SRI.

**Bajrachrya and Samdani (2021)** empirically examined the attitude of mutual fund investors in Nepal towards socially responsible investment in their paper. It is disclosed that there is no association between demographic variables, namely, age, gender, education and monthly income of the investors and their attitude towards SRI.

**Raut et al. (2021)** extended the Theory of Reasoned Action (TRA) by incorporating four variables, such as financial literacy of the investors, financial return, environmental concern, and moral norms, to study the Indian retail investors' intention towards socially responsible investment. The results of this study based on the two-step structural equation model suggested that intention toward SRI is significantly influenced by financial performance, financial literacy, attitude, subjective norms, and moral norms, except environmental concerns.

**Babu and Giridhar (2021)** carried out research to study the attitude of investors in Karnataka towards socially responsible investment. The authors found a significant relationship between the age of the respondents and their attitude towards SRI; no significant relationship is found between education, the monthly income of the respondents, and their attitude towards SRI.

**Mehwish et al. (2022)** explored the influence of environmental, social, and governance (ESG) factors on the investment behaviour of individual investors in Pakistan. The sample was collected using the snowball sampling method, and the theory of planned behaviour was employed to assess the investment behaviour. The results from SEM analysis suggested the positive and significant influence of ESG factors on investment behaviour. Of the three factors, corporate governance had the highest impact on investors' behaviour compared to environmental and social factors. This implies that investors pay attention to ESG information and value ESG parameters.

The attitudes and intentions of retail investors in India towards SRI were examined by **Garg et al. (2022)**. The authors discovered that biospheric values, SRI performance, and SRI biases had a strong positive influence on attitudes towards SRI by using Self-determination theory (SDT). Additionally, the intention towards SRI is significantly positively influenced by collectivism, biospheric values, SRI performance, SRI biases, and dependence on expert bias and attitude. The study also confirmed that attitudes and social efficacy had a mediating and moderating effect on the intention to invest in SRI.

**Thanki et al. (2022)** identified the factors influencing Indian investors' inclination to invest in socially responsible investments (SRI). By employing the Theory of Planned Behaviour, the authors concluded that attitudes towards SRI are positively influenced by factors including collectivism, environmental concern, financial performance, and SRI awareness. The analysis also indicated that attitude, perceived behavioural control and subjective norms positively influence Indian Investors' intention to invest in SRI.

**Sood et al. (2023)** conducted a study to find the most influential factor among environmental, social, and corporate governance factors that influence retail equity

investors in India. The study employed a fuzzy analytic hierarchy process. The authors concluded that among the ESG factors, corporate governance parameters were found to be the most influential factor that influences investment decisions of equity investors in India, followed by environmental factors. It was also found that the impact of social factors is very low on investment decisions.

**Gandhi and Rao (2023)** investigated awareness, attitude and intention towards SRI among investors in Gandhidham City of Gujarat state. The study found that most investors knew about SRI and that their personal values impacted whether or not they intended to invest in securities with SRI profiles. The author also claims that there was no association between investors' ages and attitudes towards SRI or between their jobs and views on social factors.

**Chalissery et al. (2023)** conducted a bibliometric analysis of SRI based on thematic clustering. The analysis of 540 SRI-related publications from the Scopus database led the authors to some specific findings. The number of studies on SRI expanded significantly between 1991 and 2021. However, the majority of these studies were conducted in the US and the UK, while India only had a small number of studies.

**Jain and Singh (n.d.)** conducted descriptive research to model the behaviour of Indian investors towards Responsible Investing (RI). Using the ISM modelling, the authors concluded that investors' attitudes, code of conduct, and portfolio risk are the most influencing factors on behaviour towards RI. They also concluded that the financial return also plays an important role in making investment decisions, and investors with a positive attitude towards environmental values are more likely to invest in RI.

**In their paper, Sharma et al. (n.d.)** observed the factors that influence the socially responsible behaviour of investors in India. The findings drawn from the Exploratory Factor Analysis and Decision Making Trial and Evaluation Laboratory (DEMATEL) technique revealed that collectivism, social investing efficacy and religiosity are the most influential factors in the socially responsible behaviour of Indian investors. The other factors include Materialism, Environment Attitude, Risk propensity, Risk Affinity and Non-economic goals.

## **2.6. Research Gap and Chapter Summary**

The present chapter summarises the earlier studies on several aspects of socially responsible investment. Studies on the performance of SRI from a global perspective and concerning the Indian economy, as well as on investor awareness and perception of SRI, attitude and intention towards SRI, and socially responsible investor behaviour, were reviewed and presented in detail. The review has shown that most studies concentrated on SRI performance and comparative performance analysis with traditional counterparts, and most of the studies were on developed countries. Globally, SRI is one of the most researched areas in finance, but in India, the number of studies on SRI is limited because of the infancy stage of the SRI market. However, the concept of socially responsible investing has gained popularity during the past decade among investors, companies, researchers, the academic community, and government. There are several studies conducted in India on investors' awareness and perception of SRI, performance comparison on SRI, and conventional investment. There has been a surge of SRI-related publications in India since 2021. This highlights India's growing interest in SRI. From the overall assessment of previous studies, it is found that no particular study on SRI has been carried out in Kerala. Therefore, the present study addresses this crucial gap in the present research environment.

## References

- Adam, A. A., & Shauki, E. R. (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production*, 80, 224–240. <https://doi.org/10.1016/j.jclepro.2014.05.075>
- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2021). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemae Meridionalis*, 24(3), 95–106. <https://doi.org/10.32725/acta.2021.014>
- Ang, W. R., & Weber, O. (2018). The market efficiency of socially responsible investment in Korea. *Journal of Global Responsibility*, 9(1), 96-110. <https://doi.org/10.1108/JGR-11-2016-0030>
- Apostolakis, G., Kraanen, F., & Van Dijk, G. (2016). Pension beneficiaries' and fund managers' perceptions of responsible investment: A focus group study. *Corporate Governance: The International Journal of Business in Society*, 16(1), 1–20. <https://doi.org/10.1108/CG-05-2015-0070>
- Arjalie's, D.-L. (2010). A Social Movement Perspective on Finance: How Socially Responsible Investment Mattered. *Journal of Business Ethics*, 92, 57–78. <https://doi.org/10.1007/s10551-010-0634-7>
- Asvathitanont, C., & Tangjitprom, N. (2020). The Performance of Environmental, Social, and Governance Investment in Thailand. *International Journal of Financial Research*, 11(6), 253-261. <https://doi.org/10.5430/ijfr.v11n6p253>
- Atan, R., Alam, Md. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182–194. <https://doi.org/10.1108/MEQ-03-2017-0033>
- Babu, K. A., & Giridhar, K. V. (March 2021). Socially Responsible Investment (SRI) Attitude of Mutual Fund Investors in Karnataka. *Towards Excellence: An Indexed, Refereed & Peer-Reviewed Journal of Higher Education*, 13(1), 131-147. <https://hrdc.gujaratuniversity.ac.in/>
- Badía, G., Cortez, M. C., & Ferruz, L. (2020). Socially responsible investing worldwide: Do markets value corporate social responsibility?. *Corporate Social Responsibility and Environmental Management*, 27(6), 2751-2764.
- Badía, G., Ferruz, L., & Cortez, M. C. (2021). The performance of social responsible investing from retail investors' perspective: international evidence. *International Journal of Finance & Economics*, 26(4), 6074-6088. <https://doi.org/10.1002/ijfe.2109>
- Bajrachrya, R. B., & Samdani, G. L. (2021). Socially Responsible Investment (SRI) Attitude of Mutual Fund Investors in Nepal. *Nepal Journal of Multidisciplinary Research*, 4(4), 23–32. <https://doi.org/10.3126/njmr.v4i4.43092>
- Banu, A. A. A. S., Bhuvanewari, T. S., & Begum, S. (2021). A Study on the Sustainable Investment Funds with Special Reference to State Bank of India ESG Mutual Fund Schemes. *Turkish Journal of Computer and Mathematics Education*, 12(6), 261-266.

- Barnett, M. L., & Salomon, R. M. (2006). Beyond Dichotomy: The Curvilinear Relationship Between Social Responsibility and Financial Performance. *Strategic Management Journal*, 27, 1101–1122. <https://doi.org/10.1002/smj.557>
- Barom, M. N. (2015). Social responsibility dimension in Islamic investment: A survey of investors' perspective in Malaysia. *Ethics, Governance and Regulation in Islamic Finance*, 5, 91-103.
- Bauer, R., Otten, R., & Tourani Rad, A. (2006). Ethical investing in Australia: Is there a financial penalty? *Pacific-Basin Finance Journal*, 14, 33–48. <https://doi.org/10.1016/j.pacfin.2004.12.004>
- Ben Ameer, H., & Senanedsch, J. W. (2014). Socially Responsible Investments: An International Empirical Study of Time-Varying Risk Premiums. *Journal of Applied Business Research (JABR)*, 30(5), 1513-1524. <https://doi.org/10.19030/jabr.v30i5.8804>
- Bollen, N. P. B. (2007). Mutual Fund Attributes and Investor Behavior. *The Journal of Financial and Quantitative Analysis*, 42(3), 683-708. <https://www.jstor.org/stable/27647316>
- Chakrabarty, B., Lee, S. B., & Singh, N. (2017). Doing good while making money: Individual investor participation in socially responsible corporations. *Management Decision*, 55(8), 1645–1659. <https://doi.org/10.1108/MD-01-2017-0005>
- Chalissery, N., Tabash, M. I., Nishad T, M., & Saleh Al-Faryan, M. A. (2023). A bibliometric analysis of socially responsible investment based on thematic clustering. *Cogent Business & Management*, 10(1), 2154057. <https://doi.org/10.1080/23311975.2022.2154057>
- Chang, C. E., & Doug Witte, H. (2010). Performance Evaluation of U.S. Socially Responsible Mutual Funds: Revisiting Doing Good and Doing Well. *American Journal of Business*, 25(1), 9–24. <https://doi.org/10.1108/19355181201000001>
- Chang, C. E., Nelson, W. A., & Doug Witte, H. (2012). Do green mutual funds perform well? *Management Research Review*, 35(8), 693–708. <https://doi.org/10.1108/01409171211247695>
- Chelawat, H., & Trivedi, I. V. (2016). The business value of ESG performance: The Indian context. *Asian Journal of Business Ethics*, 5(1–2), 195–210. <https://doi.org/10.1007/s13520-016-0064-4>
- Chhetri, R., & Sharma, D. (2022). A Study on the Level of Awareness and Perception of Investors Regarding Socially Responsible Investing in Sikkim. *East Asian Journal of Multidisciplinary Research (EAJMR)*, 1(10), 2041-2052. <https://doi.org/10.55927/eajmr.v1i10.1381>
- Chowdhury, M. A. F., & Masih, M. (2015). *Socially responsible investment and Shariah-compliant investment compared: Can investors benefit from diversification? An ARDL approach*. <https://mp.ra.ub.uni-muenchen.de/65828/>
- Copp, R., Kremmer, M. L., & Roca, E. (2010). Should funds invest in socially responsible investments during downturns?: Financial and legal implications of the fund manager's dilemma. *Accounting Research Journal*, 23(3), 254-266. <https://doi.org/10.1108/10309611011092583>



- Cortez, M. C., Silva, F., & Areal, N. (2009). *Socially responsible investing in the global market: The performance of US and European funds*
- .Daga, A., Natrajan, A., Miglani, D., Bhatti, I., Laddha, R., & Suresh, S. L. (n.d.). *Finance and Investment Cell Shri Ram College of Commerce*.
- Dalal, K. K., & Thaker, N. (2019). *ESG and Corporate Financial Performance: A Panel Study of Indian Companies*.
- De Zwaan, L., Brimble, M., & Stewart, J. (2015). Member perceptions of ESG investing through superannuation. *Sustainability Accounting, Management and Policy Journal*, 6(1), 79–102. <https://doi.org/10.1108/SAMPJ-03-2014-0017>
- De, I., & Clayman, M. R. (2014). *The Benefits of Socially Responsible Investing: An Active Manager's Perspective*. <http://ssrn.com/abstract=2464204>.
- Deloitte Poland. (2011). *Investment Decisions and Corporate Social Responsibility Survey Report*.
- Dhasmana, S., Ghosh, S., & Kanjilal, K. (2023). Does investor sentiment influence ESG stock performance? Evidence from India. *Journal of Behavioral and Experimental Finance*, 37, 100789. <https://doi.org/10.1016/j.jbef.2023.100789>
- Dilla, W., Janvrin, D., Perkins, J., & Raschke, R. (2016). Investor views, investment screen use, and socially responsible investment behavior. *Sustainability Accounting, Management and Policy Journal*, 7(2), 246–267. <https://doi.org/10.1108/SAMPJ-07-2015-0066>
- Dorfleitner, G., & Nguyen, M. (2016). Which proportion of SR investments is enough? A survey-based approach. *Business Research*, 9(1), 1–25. <https://doi.org/10.1007/s40685-016-0030-y>
- Dorfleitner, G., & Sebastian, Utz. (2014). Profiling German-speaking socially responsible investors. *Qualitative Research in Financial Markets*, 6(2), 118–156. <https://doi.org/10.1108/QRFM-07-2012-0024>
- Escrig-Olmedo, E., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2013). Sustainable Development and the Financial System: Society's Perceptions About Socially Responsible Investing. *Business Strategy and the Environment*, 22(6), 410–428. <https://doi.org/10.1002/bse.1755>
- Gandhi, A., & Rao, M. (2023). A Study on Impact of Socially Responsible Investment and Shareholders Personal Values on Investment Decisions. *South India Journal of Social Sciences*, XXI(22), 91-99. ISSN: 0972 – 8945. <https://www.researchgate.net/publication/371349022>
- Garg, A., Goel, P., Goel, P., Sharma, A., & Rana, N. P. (2022). As you sow, so shall you reap: Assessing drivers of socially responsible investment attitude and intention. *Technological Forecasting and Social Change*, 184, 122030. <https://doi.org/10.1016/j.techfore.2022.122030>
- Geczy, C. C., Stambaugh, R. F., & Levin, D. (2005). Investing in Socially Responsible Mutual Funds. University of Pennsylvania. SSRN's eLibrary. <http://dx.doi.org/10.2139/ssrn.416380>

- Gil-Bazo, J., Ruiz-Verdú, P., & Santos, A. A. P. (2008). *The Performance of Socially Responsible Mutual Funds: The Role of Fees and Management Companies*.
- Guyatt, D. (2005). Meeting objectives and resisting conventions: A focus on institutional investors and long-term responsible investing. *Corporate Governance: The International Journal of Business in Society*, 5(3), 139–150. <https://doi.org/10.1108/14720700510604779>
- Haigh, M. (2008). What Counts in Social Managed Investments: Evidence from an International Survey. In *Advances in Public Interest Accounting*, 13, 35–62. Emerald (MCB UP). [https://doi.org/10.1016/S1041-7060\(07\)13003-0](https://doi.org/10.1016/S1041-7060(07)13003-0)
- Ham, M. (2018). *Applying the Theory of Planned Behaviour in Predicting the Intention to Implement Corporate Social Responsibility*.
- Hanifa, K. U., & Atmini, S. (2023). The role of social investing efficacy in mediating the effect of individual values on ethical investment decisions. *Jurnal Akuntansi dan Keuangan Indonesia*, 20(1), 1-24.
- Hartz Pinto, D., Funcia Lemme, C., & Pereira Câmara Leal, R. (2014). Socially responsible stock funds in Brazil. *International Journal of Managerial Finance*, 10(4), 432–441. <https://doi.org/10.1108/IJMF-10-2013-0107>
- Hassan, A. (2009). After the credit crunch: The future of Shari'ah compliant sustainable investing. *Humanomics*, 25(4), 285–296. <https://doi.org/10.1108/08288660910997656>
- Hirschberger, M., Steuer, R. E., Utz, S., & Wimmer, M. (2012). *Is socially responsible investing just screening? Evidence from mutual funds* (SFB 649 Discussion Paper No. 2012-025). Humboldt-Universität zu Berlin, SFB 649. Retrieved from <http://sfb649.wiwi.hu-berlin.de>
- Hofmann, E., Hoelzl, E., & Kirchler, E. (2005). *Ethical investment: How do moral considerations influence investment behaviour?*
- Hornuf, L., & Yüksel, G. (2023). The performance of socially responsible investments: A meta-analysis. *European Financial Management*, eufm.12439. <https://doi.org/10.1111/eufm.12439>
- Humphrey, J. E., & Lee, D. D. (2011). Australian Socially Responsible Funds: Performance, Risk and Screening Intensity. *Journal of Business Ethics*, 102(4), 519–535. <https://doi.org/10.1007/s10551-011-0836-7>
- Iyer, E. S., & Kashyap, R. K. (2009). Noneconomic goals of investors. *Journal of Consumer Behaviour*, 8(5), 225–237. <https://doi.org/10.1002/cb.281>
- Jain, D., & Singh, A. (n.d.). *Modelling on Behaviour of Indian Investor towards Responsible Investing using ISM*.
- Jain, N., & Mehrotra, V. (2021). A Comparative Study of Performance of ESG Indices with Parent Index in Indian Stock Market. *Pacific Business Review (International)*, 14(2), 101-109. <https://www.researchgate.net/publication/357127666>
- Jasuja, D., Prosad, J. M., & Nautiyal, N. (2021). A Comparative Performance Analysis of Sustainability Themed Indices in India: Markov Regime Switching Approach. *Sage Journals*. <https://doi.org/10.1177/23197145211052805>

- Jensen, C., Sandberg, P., & Huynh, R. (2016). *"Doing good while doing well": An investigation of Generation Y's intention to invest socially responsibly*.
- Johansson, C., & Brandt, M. (2015). *Are ethical mutual funds safer than conventional mutual funds in the European market? A matched pair analysis of the risk in ethical mutual funds based on three GARCH models' estimates from a five-factor model* [Master Thesis, Jönköping University].
- Jonwall, R., Gupta, S., & Pahuja, S. (2022). Socially responsible investment behavior: a study of individual investors from India. *Review of Behavioral Finance*, 15 (6), 865-888. <https://doi.org/10.1108/RBF-05-2021-0099>
- Junkus, J., & Berry, T. D. (2015). Socially responsible investing: A review of the critical issues. *Managerial Finance*, 41(11), 1176–1201. <https://doi.org/10.1108/MF-12-2014-0307>
- Kempf, A., & Osthoff, P. (2006). *The Effect of Socially Responsible Investing on Financial Performance*.
- Khan, A., & Alam, A. S. (2019). Retail Investors' Attitude towards Socially Responsible Investment (SRI) in India: Examining the Role of Religiosity and Moral Norms within TPB Framework. *International Journal of Advanced Science and Technology*, 28(7), 224-238. ISSN: 2005-4238.
- Khan, F. I. (2022). Exploring socially responsible investment in Pakistan. *Perspectives*, 30, 1-6. Centre for Strategic and Contemporary Research.
- Kiran, V. U., & Tadoori, G. (2018). Integration of ESG Investment with the Traditional Portfolio- a Study of TATA Mutual Funds. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3704684>
- Ko, W. S., & Kim, S. S. (2015). Capital Market Performance of Social Responsibility Investing (SRI) Firms. *International Journal of Managerial Studies and Research (IJMSR)*, 3(2), 91-102.
- Latinovic, M., & Obradovic, T. (2013). The Performance of Socially Responsible Investments. *Entrepreneurial Business and Economics Review*, 1(2), 29–39. <https://doi.org/10.15678/EBER.2013.010203>
- Malla, V. (2017). *The S&P BSE 100 ESG Index: A Strategy for the Socially Responsible Market Participant*. Asia Index Pvt. Ltd.
- Martí-Ballester, C. P. (2015). Investor reactions to socially responsible investment. *Management Decision*, 53(3), 571-604.
- Mehwish., Afeef, M., & Kakakhel, S. J. (2022). ESG Factors and their Influence on the Investment Behavior of Individual Investors: A Case from Pakistan. *International Journal of Business and Management Sciences*, 3(3), 21-45. <https://www.ijbms.org>. E-ISSN 2708-4337.
- Moore, W. H. (2004). *The Environment and Sustainability as Investment Themes: Risk and Return Characteristics*. IWOe Discussion Paper No. 110. Institute for Economy and the Environment, University of St. Gallen.

- Murtaza, S., Mahmood, H., Noor, R. F., Sahdat, M., & Khan, J. (2013). Risk Perception of Socially Responsible Investors in Muslim Countries. *European Scientific Journal*, 9(31), 400-412.
- Nagpal, A., & Chadha, M. (2021). Investing in SRI Mutual Funds – An initiative to Sustainable development (General perspective of Delhi/NCR Investors). *Journal of Contemporary Issues in Business and Government*, 27(1), 2241-2250. <https://cibg.org.au/>
- Nair, A. S., & Ladha, R. (2013). *Investor characteristics, investment goals and choice: A test of the mediating effect of social investment efficacy on socially responsible investing behaviour in India* (Working Paper No. IIMK/WPS/124/FIN/2013/10).
- Newell, G. (2009). Developing a socially responsible property investment index for UK property companies. *Journal of Property Investment & Finance*, 27(5), 511–521. <https://doi.org/10.1108/14635780910982368>
- Nilsson, J. (2008). Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior. *Journal of Business Ethics*, 83(2), 307–325. <https://doi.org/10.1007/s10551-007-9621-z>
- Osman, I., Ma'in, M., Muda, R., Husni, N. S. A., Alwi, S. F. S., & Hassan, F. (2019). Determinants of behavioural intention towards green investments: The perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16-38.
- Osman, I., Subramaniam, G., Mohamad, S., Hanif, A., Hassan, F., & Yaakob, S. (2020). The Adoption of Socially Responsible Investments: Gen-Y Perspectives. *Malaysian Journal of Consumer and Family Economics*.
- Owen, A. L., & Qian, Y. (2008). *Determinants of Socially Responsible Investment Decisions*.
- Rathner, S. (2012). *The Performance of Socially Responsible Investment Funds: A Meta-Analysis* (Working Paper No. 2012-03). University of Salzburg.
- Raut, R. K., Das, N., & Kumar, R. (2018). Extending the Theory of Planned Behaviour: Impact of Past Behavioural Biases on the Investment Decision of Indian Investors. *Asian Journal of Business and Accounting*, 11(1), 265–291. <https://doi.org/10.22452/ajba.vol11no1.9>
- Raut, R. K., Kumar, R., & Das, N. (2021). Individual investors' intention towards SRI in India: An implementation of the theory of reasoned action. *Social Responsibility Journal*, 17(7), 877–896. <https://doi.org/10.1108/SRJ-02-2018-0052>
- Reddy, K., & Bather, A. (2013). Institutional investors, firm performance, and the prospects for socially responsible investing: Evidence from New Zealand. In *Critical Studies on Corporate Responsibility, Governance and Sustainability* (pp. 149–175). Emerald Group Publishing Limited. [https://doi.org/10.1108/S2043-9059\(2013\)0000005015](https://doi.org/10.1108/S2043-9059(2013)0000005015)
- Reka, R. B. (2017). A study on perception towards socially responsible investment behaviour among retail investors in Chennai. *International Journal of Management and Social Science Research Review*, 1(37), 207-209.
- Rosen, B. N., Sandler, D. M., & Shani, D. (1991). Social Issues and Socially Responsible Investment Behavior. *The Journal of Consumer Affairs*, 25(2), 221-234.

- Sánchez, N., & Escolano, C. (2010). Qualitative Analysis of Socially Responsible Investment Funds in Spain. *FETS - Observatori de les Finances Ètiques*.
- Satya Sekhar, G. V. (2011). Green Funds & Green Investing: A New Route to Green India. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1872370>
- Scholtens, B. (2005). What drives socially responsible investment? The case of the Netherlands. *Sustainable Development*, 13(2), 129–137. <https://doi.org/10.1002/sd.252>
- Schröder, M. (2003). Socially Responsible Investments in Germany, Switzerland and the United States—An Analysis of Investment Funds and Indices. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.421462>
- Schröder, M. (2004). The performance of socially responsible investments: Investment funds and indices. *Financial Markets and Portfolio Management*, 18(2).
- Sethi, S. P. (2005). Investing in Socially Responsible Companies is a must for Public Pension Funds? Because there is no Better Alternative. *Journal of Business Ethics*, 56(2), 99–129. <https://doi.org/10.1007/s10551-004-5455-0>
- Shank, T., Manullang, D., & Hill, R. (2005). “Doing Well While Doing Good” Revisited: A Study of Socially Responsible Firms’ Short-Term versus Long-term Performance. *Managerial Finance*, 31(8), 33–46. <https://doi.org/10.1108/03074350510769794>
- Sharma, R., Mehta, K., & Vyas, V. (n.d.). *Factors Affecting Socially Responsible Behavior of Indian Investors: Using EFA and DEMATEL*.
- Sharma, S. (2022). BSE Greenex: A Pre & Post Covid-19 Empirical Study. *Procedia Computer Science*, 214, 149–155. <https://doi.org/10.1016/j.procs.2022.11.160>
- Singh, M., Mittal, M., Mehta, P., & Singla, H. (2020). Personal values as drivers of socially responsible investments: a moderation analysis. *Review of Behavioral Finance*, 13(5), 543-565. <https://doi.org/10.1108/RBF-04-2020-0066>
- Singhal, C. (2021). A Study on ESG Investments and Millennial Investors in India. *International Journal of Creative Research Thoughts (IJCRT)*, 9(6), d681-d685. [www.ijcrt.org](http://www.ijcrt.org)
- Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2022). Did ESG portfolio augment investors’ wealth during Covid-19? Evidence from Indian stock market. *Sustainability Accounting Management and Policy Journal*, 14(2). <https://doi.org/10.1108/SAMPJ-02-2022-0087>
- Sood, K., Pathak, P., Jain, J. & Gupta, S. (2023). How does an investor prioritize ESG factors in India? An assessment based on fuzzy AHP. *Managerial Finance*, 49(1), 66-87. <https://doi.org/10.1108/MF-04-2022-0162>
- Stenström, H. C., & Thorell, J. J. (2007). *Evaluating the Performance of Socially Responsible Investment Funds: A Holding Data Analysis* [Master thesis, Stockholm School of Economics].
- Sudha, S. (2015). Risk-return and Volatility analysis of Sustainability Index in India. *Environment, development and sustainability*, 17, 1329-1342.

- Sultana, S., Zulkifli, N., & Zainal, D. (2018). Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. *Sustainability*, 10(6), 1831. <https://doi.org/10.3390/su10061831>
- Talha, M., Abdullah Salim, A. S. A., Ismail, H., & Anantharaman, R. N. (2016). Sensitivity of Socially Responsible Investment Behavior to Gender. *I J A B E R*, 14(3), 1587-1604.
- Talha, M., Salim, A. S. A., Masoud, S. B., & Abu Said, A.-M. (2012). Explaining SRI behaviour of Malaysian unit trust fund managers using theory of planned behavior. *Corporate Ownership and Control*, 9(4), 108–117. <https://doi.org/10.22495/cocv9i4art8>
- Thanki, H., Shah, S., Rathod, H. S., Oza, A. D., & Burduhos-Nergis, D. D. (2022). I Am Ready to Invest in Socially Responsible Investments (SRI) Options Only If the Returns Are Not Compromised: Individual Investors' Intentions toward SRI. *Sustainability*, 14(18), 11377. <https://doi.org/10.3390/su141811377>
- Tobias Peylo, B. (2014). Rational socially responsible investment. *Corporate Governance*, 14(5), 699–713. <https://doi.org/10.1108/CG-08-2014-0089>
- Tripathi, V., & Bhandari, V. (2015). Socially responsible stocks: A boon for investors in India. *Journal of Advances in Management Research*, 12(2), 209–225. <https://doi.org/10.1108/JAMR-03-2014-0021>
- Utz, S., & Wimmer, M. (2014). Are they any good at all? A financial and ethical analysis of socially responsible mutual funds. *Journal of Asset Management*, 15, 72-82.
- Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, 8(2), 169–178. <https://doi.org/10.1108/JGR-11-2016-0029>
- Viviers, S., Bosch, J., Smit, E., & Buijs, A. (2009). Responsible investing in South Africa. *Investment Analysts Journal*, 38(69), 3–16. <https://doi.org/10.1080/10293523.2009.11082505>
- von Wallis, M., & Klein, C. (2015). Ethical requirement and financial interest: A literature review on socially responsible investing. *Business Research*, 8, 61–98. <https://doi.org/10.1007/s40685-014-0015-7>
- Vyas, V., Mehta, K., & Sharma, R. (2020). Investigating socially responsible investing behaviour of Indian investors using structural equation modelling. *Journal of Sustainable Finance & Investment*, 12(2). <https://doi.org/10.1080/20430795.2020.1790958>
- Wiesel, M., Myrseth, K. O. R., & Scholtens, B. (2016). *Social preferences and socially responsible investing: A survey of US investors*. (Working Papers in Responsible Banking & Finance). University of St Andrews.
- Wimmer, M. (2013). ESG-persistence in Socially Responsible Mutual Funds. *Journal of Management and Sustainability*, 3(1), p9. <https://doi.org/10.5539/jms.v3n1p9>
- Yew, C. M., Ni, L. K., Sin, L. P., & Chen, Y. P. (2019). *Factors that Affect Investor's Intention to Invest in Social Responsibility Investment (SRI)* [Bachelor of Finance (HONS) Project, Universiti Tunku Abdul Rahman].

## **CHAPTER 3**

### **THEORETICAL FRAMEWORK**

## CHAPTER 3

### THEORETICAL FRAMEWORK

#### 3.1. Introduction

The previous chapter reviewed the relevant literature on socially responsible investment (SRI) and the variables and research gaps determined for the research. It is essential to include the definitions and concepts related to SRI to cover the topic under study comprehensively. This chapter presents a detailed conceptual and theoretical framework for SRI. The chapter travels from definitions of SRI, SRI development, various SRI concepts and dimensions, various SRI strategies, institutional framework for SRI to sustainability rating, indices and disclosures.

#### 3.2. Socially Responsible Investment (SRI): Definitions

The terms sustainable investing, ESG investment, socially responsible investment or sustainable and responsible investment are used interchangeably. Sustainable investing is considered a broad term, and all others, including socially responsible investment, ESG investment, and impact investment, are considered subcategories of sustainable investment (Narayanan & Sirigauri, n.d.).

Following are some of the definitions of socially responsible investment.

According to the UK Social Investment Forum: “Socially Responsible Investment (SRI) combines investors’ financial objectives with their concerns about social, environmental and ethical (SEE) issues”.

European Social Investment Forum (Eurosif): “Socially Responsible Investment (SRI) combines investors’ financial objectives with their concerns about social, environmental, ethical (SEE) and corporate governance issues. SRI is an evolving movement, and even the terminology is still very much in the evolving phase. Some SRI investors refer only to the SEE risks, while others refer to ESG issues (Environmental, Social, and Governance). Eurosif believes both are relevant to SRI. SRI is based on a growing awareness among investors, companies and



governments about the impact that these risks may have on long-term issues ranging from sustainable development to long-term corporate performance.”

Principles for Responsible Investment (PRI) defines *responsible investment* as “a strategy and practice to incorporate environmental, social and governance (ESG) factors in investment decisions and active ownership. It complements traditional financial analysis and portfolio construction techniques”.

According to Global Sustainable Investment Review (2022), “Sustainable investment is an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management”.

### **3.3. Socially Responsible Investment (SRI): Concept**

The concept of SRI involves the integration of ESG factors into investment decisions. Environmental factors include the role and responsibility of businesses towards environmental protection and creating positive environmental impacts. Social factors include the role of business towards protecting social values and creating benefits for society. Corporate governance focuses on protecting and rewarding the shareholders and transparent management of the capital contributed by them. “Corporate governance is the system by which business corporations are directed and controlled” (OECD, 2016, as cited in Castrillón, 2021). The increased incidence of the collapse of large business organisations, bankruptcy and corporate scams made investors and all other stakeholders of business recognised the need for corporate governance (Castrillón, 2021).

Socially responsible investment is both a strategy and a financial instrument. It is the strategy of identifying and investing in best-in-class companies or selecting companies based on their financial and corporate social performance. It is a financial instrument in which investors buy, hold, or sell securities of socially responsible companies (Louche, 2009).

SRI considers hard and soft values; hard value refers to financial return from an investment and soft value refers to non-financial aspects of an investment. The non-financial aspects include positively impacting society or the environment (Revelli, 2015, as cited in Fritz, 2020).

Socially responsible investments are made with ethical ideology to protect some particular economic sectors and companies (Chamorro-Mera & Palacios-González, 2019). Socially responsible investment considers moral, ethical, religious and non-financial aspects of money management (Pitluck, 2008). It is an investment strategy of excluding sin companies from the investment portfolio or including good companies with good corporate governance, environmental policies, better working conditions for employees and creating benefits to society.

### **3.4. Evolution of Socially Responsible Investment**

SRI has a history spanning over two centuries. In the beginning stage, SRI was conceived as a niche market for religious groups. They avoided investing in certain companies on religious grounds (Chowdhary & Masih, 2015). At that time, the term ethical investment was used to denote the concept of socially responsible investment. Ethical investment involves using ethical and social criteria in the investment analysis, selection and management (Sparkes, 2002). The concept of ethical investment started in the early 1500s when various religions, Christianity, Judaism and Islam, started to avoid investment in sin stocks, such as alcohol, tobacco, and gambling, as a part of their religious values and beliefs. John Wesley was one of the notable religious leaders who discouraged parishioners from investing in sin industries. He laid the foundation for the idea of SRI.

The first fund which enabled investors to exclude investments in sin stocks was introduced in 1928, known as the Pioneer Fund (Sinha & Datta, 2019). The Church of England, the Society of Friends, and the Quakers were some of the earliest notable ethical investors in the UK. The first of these began in 1948 and involved selecting and managing portfolios based on ethical criteria. This method of portfolio selection based on ethical screening was known as the simple avoidance approach. It involved excluding investment in alcohol, tobacco, defence and gambling (Sparkes, 2002). Later, the first book on corporate social responsibility (CSR), titled ‘Social Responsibilities of the Businessman’, was published by Howard R. Bowen in 1953.

The political factors also influenced the growth of SRI. In the 1960s, gender discrimination and discrimination of minorities influenced investors to support SRI (Schueth, 2003, as cited in Camilleri, 2017). In 1977, Reverend Leon Sullivan advocated six principles known as the Sullivan Principles for the companies in South Africa, which aimed to abolish racial and gender discrimination, equal and fair treatment of employees and to ensure economic, social and political justice in companies. The Sullivan Principles encouraged retail and institutional investors in the US to divest from irresponsible companies (Camilleri, 2017).

The environmental threats imposed by companies like Chernobyl, Bhopal and Exxon Valdez also encouraged investors to look into environmental aspects of investment (Pienitz & Vincent, 2000, as cited in Camilleri, 2017).

From the 1990s onwards, the UNPRI focused more on the sustainable development aspect of SRI. The first SRI mutual fund was introduced in 1990, the Domini 400 Social Index (DSI), by KLD's Amy Domini in the US equity market. In 1999, the Dow Jones Sustainability Index was launched. The first Corporate Governance Code published in the UK in 1998 enhanced the governance disclosures of SRI.

The socially responsible investment sector experienced consistent growth from 2004 onwards. In 2005, Ivo Knoepfel introduced the term "ESG" in his paper titled 'Who Cares Win'. Later, in 2006, the United Nations Principles of Responsible Investment (UNPRI) introduced six principles for voluntarily including ESG factors in investment by investors. This was a significant milestone in the mainstreaming of SRI. Socially responsible investment increased in popularity and broader acceptance after the introduction of Principles for Responsible Investment by the United Nations in 2006. These principles established the guidelines for voluntarily adopting ESG factors to investment. UNPRI focuses more on including ESG factors in investment than excluding companies based on weak ESG performance.

One of the key factors contributing to the growing importance of SRI is the increased consequences companies face due to poor corporate governance and lack of environmental and social commitments. The global financial crisis in 2007-2008 also fuelled the growth of SRI (Sarangi, 2021).

The Sustainable Development Goals of the United Nations, introduced in 2015, also impacted the growth of SRI globally. In 2017, to reduce the effect of climate risk caused by companies, reduce the emission of greenhouse gases and attain net-zero emissions, investors initiated the launch of Climate Action 100+ (CA100+) (Douma et al., 2017).

SRI changed from its niche stage to a mainstream investment segment. Initially, it was an investment approach practised by a small number of retail investors on ethical or religious grounds. It has become a worldwide phenomenon with large institutional investors as the major players (Sparkes & Cowton, 2004).

The increased consequence of environmental issues and climate change are also reasons behind the growth of SRI. The COVID-19 pandemic and other natural calamities resulted in systematic risks to companies. The COVID-19 pandemic encouraged both developed and developing countries to focus more on SRI and thereby help to minimise risk and maximise return (Sinha & Juneja, 2022).

Now, SRI is a well-established financial segment globally. As per the latest report of UNPRI, the UNPRI has 5319 signatories and 725 asset owners and has US\$121.3 trillion in assets under management of socially responsible investment (Principles of Responsible Investment, n.d.).

### **3.5. Motivations behind SRI**

There are numerous motivations and actions behind the SRI movement. The underlying motives behind socially responsible corporate behaviour can be grouped into three major theories: instrumental theories, relational theories, and ethical theories. These three motivations co-exist in varying degrees and do not conflict (Jun, 2018). The motivation behind SRI is different for different shareholders; some may be motivated by the risk-return characteristics of SRI, and others may be interested in the social responsibility aspects of SRI with return (Camilleri, 2017).

#### **3.5.1. Instrumental Theories**

These theories emphasize the economic aspects of SRI and consider SRI as a tool for wealth creation. This theory is applicable at the corporate level and is solely

driven by investing firms or corporates to enhance their international competitiveness. The two primary motives behind SRIs are financial and non-financial return; thus, the first part of SRI deals with its financial aspects.

### **3.5.2. Relational Theories**

These theories deal with social aspects that sustain harmonious relationships with various societal stakeholders. It incorporates the social needs of SRI to promote social cohesion and reduce social exclusion.

### **3.5.3. Ethical Theories**

These theories deal with the ethical relationship between business and society. SRI is deeply rooted in specific moral and ethical standards, and SRI's motivations are moral. These can be applied at individual, corporate, and governmental levels. Based on ethical aspects, investors may include ethically behaving corporates and exclude corporates from portfolios based on unethical behaviour.

## **3.6. SRI Strategies and Practices**

The implementation of socially responsible investing (SRI) takes place through various SRI strategies, practices, techniques, or approaches. These techniques can be used individually or combined to integrate ESG issues into existing investment strategies. There is no uniform standard or theory to assess the risk-return characteristics of socially responsible investments. Asset managers and investors use different screening techniques for portfolio analysis and selection. Vandekerckhove and Leys (2007) described three models of SRI: exclusion or inclusion, best-in-class, and shareholder engagement. Global Sustainable Investment Review (2022) identified seven core strategies or approaches to socially responsible investment; they are discussed below:

### **3.6.1. ESG integration/ ESG incorporation**

The process of integrating environmental, social and corporate governance factors into the construction and management of investment portfolios is known as ESG incorporation. It involves the incorporation of ESG parameters in financial analysis. Usually, screening, integration and thematic investment are the three popular

approaches used in the ESG integration process. It is the systematic integration of ESG factors into the entire portfolio selection and management. The companies are included in the portfolio after considering ESG risks and opportunities (Narayanan & Sirigauri, n.d.).

The ESG integration enables investors and asset managers to support traditional financial analysis by including ESG parameters (Eurosif, 2018). It helps identify ESG risks and opportunities of a particular sector, industry or company.

ESG integration helps mitigate long-term and short-term business risks and generate returns (Sinha & Juneja, 2022).

### **3.6.2. Corporate engagement & shareholder action/ Shareholder activism**

Active ownership or Stewardship refers to the promotion of more socially conscious companies by the investors through engagement and proxy voting. It is the strategies existing investors use to ensure more sustainable business practices. The aim of stewardship is good corporate governance for the betterment of shareholders (Wagstaff & Belsom, n.d.). Active ownership or stewardship is a strategy to encourage corporate behaviour on ESG performance. Through stewardship, investors can influence the companies they have already invested in to encourage sustainable business practices. Engagement and proxy voting are the two main strategies used under stewardship.

The influence of shareholders on policy and decisions of companies is known as shareholder democracy (Parkinson, 1993, as cited in Bruin, 2013). Shareholder activism represents a method of shareholder democracy and is considered an extreme form of shareholder democracy.

The terms shareholder activism, shareholder advocacy and shareholder engagement are used interchangeably. Shareholder activism is a strategy for socially responsible investment. It is the investors' engagement with the management on non-financial issues to influence corporate behaviour. It is a widely used investing strategy by large-scale institutional investors such as insurance companies, pension funds and mutual funds. It helps to improve corporate social performance (Vandekerckhove & Leys, 2007). The two types of engagement are shareholder engagement (engagement

between the company and shareholders) and stakeholder engagement (engagement between the company and other stakeholders). Shareholders influence corporates through special resolutions in the annual general meeting. Investors influence corporate behaviour by directly addressing ethical concerns to the management, which is known as soft engagement.

Investors can use the ‘voice strategy’ to communicate their suggestions and ideas with the company and influence corporate behaviour. Investors can also use the ‘exiting’ engagement method: take back their investment from the company. Shareholder engagement is an interactive process to motivate corporate social performance (Gossling & Buiter, 2017).

Engagement comes under active ownership and is the direct communication between any investor or group of investors with the company in ESG matters. It encourages companies to improve ESG disclosures and reporting (Wagstaff & Belsom, n.d.). Shareholder advocacy has expanded and advanced as more institutional investors are attracted. It is derived from the social responsibility of shareholders. Shareholder activism is the direct interaction between shareholders and management to change corporate social behaviour, encouraging firms to be actively involved in environmental and social issues. Thus, it is a form of social movement activism. It aims to benefit shareholders and other stakeholders (Camilleri, 2017).

Shareholder activism can be implemented through proxy voting, filing shareholder proposals and communicating with the board of directors, resolutions at the company’s annual meetings or executives, letters, divestment and proxy voting.

### **3.6.2.a. Divestment**

Divestment as a strategy of SRI refers to divestment from sin stocks and channelizes the capital flows to environmentally friendly projects. For instance, it involves divestment from fossil fuel-related sectors, such as the coal and oil industries (Eurosif, 2018).

### **3.6.2.b. Proxy voting**

It is using voting rights to express an opinion on ESG issues formally. Under proxy voting, investors vote their consent or dissent for resolution on ESG-related issues (Principles of Responsible Investment, n.d.).

### **3.6.3. Norms-based screening**

Screening is the process of including or excluding the stocks of certain companies based on social, environmental, or corporate governance parameters. Companies are included or excluded from the portfolio based on investors' values, ethics, and preferences. SRI screening is a subjective approach. The two motives of SRI screening are value-driven and profit-seeking (Derwall et al., 2010).

Negative screening and positive screening are the most common methods of screening, and these two methods can be connected to the carrot-and-stick approach. In negative screening, the stick approach is used; investors punish socially irresponsible companies by excluding them from the portfolio or selling the stocks of those companies that harm society and the environment or are against sustainability. In positive screening, the Carrot approach is adopted, rewarding those socially sustainable firms by buying their stocks and including them in the portfolio (Shah, 2018).

The norm-based screening comes under negative screening, in which companies or industries breaching generally accepted norms (recommended by the UN, OECD, ILO, and NGOs) are excluded from the portfolio. Norm-based screening also screens companies according to UN Sustainable Development Goals (SDGs) norms. The themes include human rights, labour standards and protecting employees, consumers and the environment. This norm-based screening strategy can be used individually or along with other strategies of SRI. This strategy is less commonly favoured these days. Socially conscious investors are in search of more advanced screening techniques and strategies; thereby, the popularity of norm-based screening has been waning recently (Eurosif, 2018).



#### **3.6.4. Negative/exclusionary screening**

The negative screening comes under the avoidance strategy of SRI. This is the most practical and popular screening method, in which the company/companies or industry/industries are excluded from the portfolio based on some social, ethical or environmental screens. For example, avoiding investment in sin stocks, companies producing alcohol, tobacco and war equipment or are engaged in corruption or controversies. Negative screening is the oldest form of screening. The history of negative screening is rooted in the Anglo-Saxon period, in which Quakers avoided making investments in sin stocks. Under negative screening, companies that do not adhere to the established ESG criteria are excluded from the portfolio. It is an avoidance strategy. The Tobacco Free Portfolios initiative is an example of negative screening introduced by Dr Bronwyn King in 2010 to attain a tobacco-free investment portfolio worldwide (Eurosif, 2018).

It is the more straightforward method of SRI screening. Negative screening is also known as exclusionary screening. Negative screening can be implemented based on product or firm wise. Product-wise screening involves the exclusion of investment in tobacco, alcohol, weapons, uranium, pornography, gambling and other sinful products. Firm-wise screening involves excluding companies from the portfolio for violating human rights, child labour, employee discrimination, environmental pollution and unethical corporate behaviour. Negative screening or exclusionary approach is the most widely used SRI screening strategy (Berry & Junkus, 2013). Negative screening is a ‘never if’ strategy (Michelson et al., 2004).

The drawback of negative screening is that the complete exclusion of a particular industry or product may negatively affect the economy, and the people working in that industry may lose their jobs (Camilleri, 2017).

#### **3.6.5. Positive screening/Best-in-class**

It is an inclusionary screening approach and involves a complicated process of finding and selecting socially responsible companies. In this approach, investors assign points to socially responsible companies and help attain the investors’ financial and non-financial objectives (Schueth, 2003, as cited in Camilleri, 2017). In positive screening, investors reward socially responsible firms by including them in their

portfolios. Negative screening limits the scope for diversification, whereas positive screening improves the scope for diversification. It provides investors a broad opportunity set of companies committed to environmental and social issues. Positive screening involves companies with sound environment management systems, waste management, energy efficiency, renewable energy sources, pollution-free operations, education and health care (Roca et al., 2010). Positive screening is an ‘only if’ strategy (Michelson et al., 2004). Positive screening is considered the core strategy of SRI (Sinha & Datta, 2019). Positive screening is associated with the support strategy of SRI, which is aimed at investing in those companies which show socially responsible corporate behaviour. Companies engaged in the production of eco-friendly products, climate protection, good stakeholder relations and good CSR practices are included in the portfolio.

#### **3.6.5.a. Best-in-class (BIC)**

The best-in-class screening is the more inclusive strategy of SRI, including the best environmental and social performers (Roca et al., 2010). The Earth Summit in Rio de Janeiro in 1992 made best-in-class screening more popular (Sinha & Datta, 2019). Best-in-class is a form of positive screening in which the best-performing companies are selected based on specific non-financial parameters like better ESG performance or ESG scores. It comes under the comparative strategy of SRI, in which companies are benchmarked based on their performance and selected as the leading ones (Louche, 2009). BIC screening enables investors to choose companies which perform better in terms of both financial performance and ESG parameters (Eurosif, 2018)

#### **3.6.6. Sustainability-themed/Thematic investing**

Sustainability-themed or thematic investing involves investment based on a particular theme or asset class that contributes towards sustainable growth. It promotes investments in sustainable agriculture, eco-friendly constructions and pollution-free projects. ESG thematic focus concentrates on a single theme under ESG parameters. That is, the companies’ overall ESG scores or performances are not considered and rely on any aspects of ESG like carbon emission or carbon footprint (Narayanan & Sirigauri, n.d.).

It enables investors and asset managers to invest in particular sustainable development themes like renewable energy, climate change, waste and water management, sustainable construction and transportation. It is also aligned with the themes of SDGs (Eurosif, 2018).

### **3.6.7. Impact Investing and Community Investing**

Impact investment is one of the rapidly growing marketing segments. It aims at both financial return and positive social or environmental impact. It is the incorporation of philanthropic objectives to economic return. Impact investors may be institutional investors, retail investors, groups of investors, or venture capital funds; they invest in businesses that create financial and social benefits (Roundy et al., 2017). Impact investment is also known as positive impact investment. Impact investment is developed from the venture capital community. It aims at both financial return and social or environmental impact. Impact investment is a product of interaction between four stakeholders: asset owners, asset managers, demand side stakeholders and service providers. The impact investment may be made by companies by mobilising public or private capital, high net worth individuals, investment banks, organisations, foundations, pension funds, endowments and development financial institutions. Global Impact Investing Network (GIIN), Global Impact Investing Rating System (GIIRS) and IRIS (ESG metric) help ensure the effectiveness of impact investing (Camilleri, 2017). Impact investing can support philanthropic objectives (Höckstädter & Sheck, 2015, as cited in Fritz, 2020).

The impact investment involves investment in micro-finance, health care, education, food and agriculture, clean and renewable energy, community development, consumer goods, industrial development, technological development and transportation.

The impact investing may also result in tangible outcomes in food and shelter, environmental well-being, satisfaction of basic needs, housing facilities for the poor, financial assistance and other services (Jackson, 2013, as cited in Camilleri, 2017).

Impact investment involves investment in projects to bring some change to society or the environment (Caplan et al., 2013).

The government of India introduced the Impact Investors Council (IIC) to promote impact investing in India. According to Section 8, 80G, 12AA of the Companies Act 2013, it is a non-profit organisation. It encourages social benefit and welfare by channelling private capital to impact investing.

The impact investment may produce measurable positive outcomes for society, the environment and the financial return (Easton & Pinder, 2018). The three essential characteristics of impact investing are the intention of investors to make some impact on the society or environment, additional social or environmental impact over financial gain and transparency of financial, social and environmental performance (Eurosif, 2018). According to the report of Eurosif (2018), the US \$114 billion is employed in impact investment.

#### **3.6.7.a. Community Investing**

Community investing involves uplifting communities by directly lending money to underprivileged communities. Community investing can be done as a part of impact investing, but it is a broader concept than impact investing. Community investment is one of the most rapidly expanding investment segments. It involves investment in social capital for the sake of people experiencing poverty in the form of infrastructure development, availability of resources and financial assistance (Mansuri & Rao, 2004, as cited in Camilleri, 2017).

Community investments provide financial assistance to low-income groups through modern credit channels. Community investment is supported by Community Development Financial Institutions (CDFI), Community Development Banks (CDBs), NGOs, charitable foundations, philanthropic organisations, business organisations, trusts, credit unions and microfinance.

### **3.7. Types of Socially Responsible Investments**

The social responsibility theme is extended to asset classes like listed equity, private equity, microfinance, mutual funds, fixed-income funds, bonds, commodities, exchange-traded funds, hedge funds and real estate. The methodology used by these asset classes for incorporating sustainability and the degree of sustainability differs for different funds. Listed equity and fixed-income funds are the most used asset classes

for incorporating sustainability (Morgan Stanley, 2018, as cited in Sinha & Datta, 2019). For global investors, the most preferred form of ESG asset class is equities and the second most preferred is ESG-themed bonds, but in the year 2021 onwards, more global investors were attracted to alternative ESG-based investment opportunities, which include commodities, real estate and exchange-traded funds (ESG Global Study 2022).

### **3.7.1. Social Responsibility Linked Equity Investment**

Social responsibility-linked equity investment has experienced a surge in growth in recent years. According to UN Principles for Responsible Investment, the strategies for including ESG factors in equity investment are fundamental analysis and smart beta strategies. In fundamental analysis, the economy fundamentals, industry and company analysis are made using a qualitative approach, and statistical techniques and mathematical models are used in quantitative analysis. Smart beta strategies are contemporary methods for incorporation of ESG parameters into investment. It uses passive and active investment strategies to construct ESG-themed portfolios, resulting in maximum return with minimum risk (Sinha & Datta, 2019).

### **3.7.2. Social Responsibility Linked Bonds**

Green bonds are a social responsibility bond. It is also referred to as climate bonds. These are fixed-income bonds that may positively impact the climate or environment. The objective of green bonds is to produce benefits to the climate or result in eco-friendly projects. The European Investment Bank issued its first green bond in 2007 and was listed on the Luxembourg Stock Exchange (Sinha & Datta, 2019). World Bank is the primary issuer of green bonds. Investors can achieve their social responsibility objective by investing in green bonds. World Bank support sustainable development through sustainable development bonds. The central social themes of sustainable development bonds include health care, education, nutrition, food security, social security, financial assistance, housing facilities, training and employment and technical and advisory services. The central themes of green initiatives of sustainable development bonds include environmental-friendly agricultural development, better water management, protection of bio-diversity, effective management of natural resources, environment and climate risk

management, and all other initiatives for environment protection and reduction of greenhouse gas emissions (World Bank Impact Report, 2020). According to the report of the WFE Annual Sustainability Survey (2019), the green bond issuance of the World Bank attained US\$13 billion in 2018.

Green bonds provide investors and bond issuers opportunities to create positive outcomes for society, environment or climate change. Green bonds also encourage the attainment of SDGs and projects under the Paris Agreement commitments. The European Investment Bank issued the first AAA-rated green bond in 2007 (Eurosif, 2018).

### **3.7.3. Private Equity**

Private equity investment involves investment of equity capital in private companies. In private equity investment, the investment managers are commonly referred to as general partners (GPs). It involves a capital commitment for an extended period and follows a stewardship approach.

These characteristics of private equity investment created a tremendous scope for integrating ESG factors into private equity investment. Recent reports reveal that the general partners actively identify and integrate ESG risks and opportunities to private equity (Douma et al., 2017).

### **3.7.4. Hedge Funds**

Hedge funds mobilise funds from investors and maximise the return for investors by minimising risks using hedging strategies. Hedge funds have recently begun incorporating ESG parameters by employing different strategies, including negative screening, shareholder activism, ESG due diligence and impact investing. As per the report of UN PRI, hedge fund investors show increasing interest in ESG integration to investment (Sinha & Datta, 2019).

### **3.7.5. Mutual Funds and Exchange-traded Funds (ETFs)**

There are numerous mutual funds, and ETFs follow ESG standards. SRI mutual funds are those mutual funds that construct portfolios based on environmental, social, and corporate governance parameters (Sorrosal-Forradellas et al., 2023)

In the case of socially responsible mutual funds, the financial performance may decline due to less scope for diversification. As the number of social screens increases, the financial performance decreases. The return can be enhanced by using more sophisticated methods of social screens and better-managed funds to portfolio Barnett & Salomon (2006).

### **3.7.6. Community Investments**

Investing money directly in projects for the benefit of the community is known as community investment. It is considered as a subset of SRI. Community development financial institutions directly lend loans for community development, poverty alleviation, education of the poor, construction of houses for the poor, and other community services (Sun et al., 2011).

### **3.7.7. Social Impact Bonds**

Social impact bonds (SIB), alternately termed payment-by-results, are innovative financial instruments for social welfare, aiding in achieving SDGs. Peterborough Prison in the UK issued the social impact bond for the first time in 2010. It aims to create social outcomes by coordinating government, investment community, intermediaries, service providers and service users. Social impact bonds encourage public spending to find solutions to social problems. Every SIB addresses one particular social issue (Eurosif, 2018). In India, NABARD issued AAA-rated social impact bonds for the first time in 2023.

### **3.7.8. Green mutual fund**

Green mutual funds are also known as green funds offered by environmentally friendly investment companies. Both green mutual funds and alternative energy mutual funds come under the category of socially responsible investment. The portfolio of green mutual funds includes only less polluting and environmentally friendly companies and those that produce and sell eco-friendly products. The popularity of green mutual funds has increased in recent years as more and more investors consider environmental issues. Many investors are now being influenced by factors such as rising natural disaster rates, increasing oil consumption, and the effects of global warming (Sekhar, 2011).

### **3.8. Market Players in Socially Responsible Investments**

Louche (2009) classified market participants in SRI into investors, raptors, and connectors.

**3.8.1. Investors-** this category includes retail and institutional investors engaging in securities of socially responsible companies. Institutional investors include mutual funds, pension funds and insurance companies.

**3.8.2. Raptors-** this category includes various sustainability-themed indices and sustainability rating agencies and organizations frequently publishing ESG scores of different companies.

**3.8.2. Connectors-** are the link between various market participants in the SRI market. They make initiatives to encourage sustainable investments.

### **3.9. Types of Socially Responsible Investors**

The socially responsible investor is any investor who integrates ESG parameters into the fundamental analysis of the company, who alerts business on various ESG issues that may affect their investment decision-making, encourage the companies they have invested to be transparent and disclose various ESG aspects, and periodically evaluates the ESG risk associated with their portfolio and company. A socially responsible investor does not invest in sin stocks and other companies that violate human rights, harm the environment and society, sell weapons and other war-related gadgets and goods that create health issues and are involved in unethical business practices (Shah, 2018).

Socially responsible investors can be categorised into three they are:

**3.9.1. Value-enhancing SRI:** For the Value-enhancing SRI investors, the primary objective is financial return, but they are aware that considering ESG issues to investment has a favourable impact on financial return.

**3.9.2. Value-seeking SRI:** The Value-seeking SRI investors integrate non-financial factors into their investment decision-making; they are interested in both financial and non-financial returns from investment



**3.9.3. Value-based SRI:** Value-based SRI investors are ready to sacrifice financial return for social responsibility. They are more socially responsible than all other categories and the non-financial factors from investment are more critical (Pfothenauer, 2022; Kinder, 2007).

The value-based investors come under the Core SRI concept and Value-seeking SRI and Value-enhancing SRI investors come under the Broad SRI concept. In core SRI, the primary focus is on non-financial factors from the investment; for broad SRI, the primary focus is on financial factors (Strong, 2010).

### **3.10. Different Aspects of Socially Responsible Investment**

The UKSIF considers the concepts of socially responsible investment, sustainable investment, ethical investment and ESG investment to be the same. Socially responsible investment can be categorized into five sub-categories: social investment, sustainable investment, ESG investment, community investment and religious investment (Juetten, 2011). Principles for Responsible Investment consider responsible investment broader than all other concepts, including sustainable investing, ethical investing, impact investing, and other related concepts. The terms socially responsible investment or responsible investment can be used interchangeably with sustainable investment (Global Sustainable Investment Review, 2020).

Conventional investment is solely motivated by financial return and ESG investment aims at financial return by incorporating ESG parameters into investment analysis. SRI is an addition to ESG investment because it incorporates additional ethical screens and value-based norms with ESG analysis. Impact investment involves financial gain to the investors with a positive impact on society and philanthropy driven solely by positive outcomes to society without any financial gain (Narayanan & Sirigauri, n.d.). The following are different concepts relating to SRI.

#### **3.10.1. Ethical Investment**

The origins of ethical investing are traced back to the USA; the aim was to create investment habits among religious people (Khan & Alam, 2019). Sparkes (2002) defined ethical investments as the exercise of ethical and social criteria in selecting and managing investment portfolios, generally consisting of company

shares. Ethical investments are based on individual beliefs and ethics; thus, they are personalised investments. Ethical funds are considered a tool for social transformation (Chaubey et al., 2016). Ethical investments are based on moral beliefs rather than financial gain (Norup & Gottlieb, 2011). Hard-core ethical investors are those willing to invest in ethical funds despite low returns (Jansson & Biel, 2011).

Ethical investing has attained notable prosperity due to institutional and retail investors and asset managers' inclusion of moral and ethical considerations in investment. In the UK, the term 'ethical investment' is usually preferred; in the US, the term 'socially responsible investment' is preferred. (Michelson et al., 2004). Ethical investment involves the integration of social, ethical or environmental criteria into investment decision-making. Ethical investment has been replaced by 'socially responsible investment' (Daugaard, 2019). The mainstreaming of 'socially responsible investment' is the reason behind this trend (Sparkes, 2002).

### **3.10.6. Ethical Banking**

Ethical banks are those banks that lend money solely for ethical purposes or based on social responsibility criteria (Chamorro-Mera & Palacios-González, 2019). Ethical banking receives deposits, lends loans and provides in other banking facilities as ordinary banks but for the promotion of sustainable development. These banks lend loans only for projects which aim for sustainable development. These banks provide loans to economically weaker sections of society and engage in community development and financial inclusion. The concept of ethical banking includes social banks and community development banks. The ethical banks focus on a triple-bottom-line approach of profit, people and the planet. These banks follow more transparent business operations and avoid making a profit from speculative activities (Jayasekera & Pushpakumari, 2020).

### **3.10.2. Religious Investment**

Religious investment involves the selection of investment alternatives as per religious beliefs. According to religious beliefs, the investment in sin stocks is avoided. Islamic investment is an example of religious investing. It is believed that SRI has its origins in religious investment (Juetten, 2011).

### **3.10.3. Islamic Investment**

Islamic investment has been one of the most expanding financial sectors along with SRI during the last two decades (Chowdhary & Masih, 2015). Shariah-compliant stocks are the most popular means of Islamic investment in India, and these funds adhere to the law of 'shariah'. Exclude investment in companies engaged in the production of alcohol, drugs, or selling weapons or income from selling pork, gambling and pornography. Shariah funds accept only halal income. In India, Shariah-compliant stocks were introduced in 2006, the Nifty Shariah index and S&P Shariah index by the National Stock Exchange (NSE) in 2006, and the BSE Tasis Shariah index by the Bombay Stock Exchange (BSE) in 2010 (Munusamy, 2015).

Combining SRI and Islamic finance characteristics can create new products to satisfy both SRI and Shariah-compliant investors (Bennett & Iqbal, 2013).

### **3.10.4. ESG Investment**

ESG investment is derived from socially responsible investment (Narayanan & Sirigauri, n.d.); Asvathitanont & Tangjitprom, 2020). ESG investment uses environmental, social and corporate governance parameters to evaluate the interaction of companies with their internal and external stakeholders. These parameters can also be used to examine the risk and long-term financial well-being associated with the investment. ESG stands for various environmental, social, and corporate governance factors. These factors may influence investment decisions. In his paper 'Who Cares Win' from 2005, Ivo Knoepfel coined the phrase "ESG" (Pancholi et al., 2022). ESG investment is viewed as a successor to SRI, and CSR forms only a small part of ESG investment. ESG investment involves quantifying the qualitative impact of business towards the environment, employees, stakeholders and shareholders. ESG parameters give guidelines for business operations. In India, ESG investment is considered one of the fastest-growing investment sectors. Table 3.1 presents different ESG factors.

**Table 3.1**

**ESG Factors**

<b>Environmental factors</b>	<b>Social factors</b>	<b>Corporate governance factors</b>
<ul style="list-style-type: none"> <li>➤ Climate change</li> <li>➤ Pollution</li> <li>➤ Waste</li> <li>➤ Resource depletion</li> <li>➤ Deforestation</li> <li>➤ Emissions</li> <li>➤ Environmental policies</li> <li>➤ Toxic chemicals</li> <li>➤ Genetic engineering</li> <li>➤ Use of resources</li> <li>➤ Environmental management system</li> <li>➤ Water</li> </ul>	<ul style="list-style-type: none"> <li>➤ Child labour</li> <li>➤ Human rights</li> <li>➤ Modern slavery</li> <li>➤ Working conditions</li> <li>➤ Employee relations</li> <li>➤ Stakeholder relations</li> <li>➤ Diversity</li> <li>➤ HIV/AIDS</li> <li>➤ Health and Safety</li> <li>➤ Labor relations</li> <li>➤ Treatment of customers</li> <li>➤ Product Safety</li> </ul>	<ul style="list-style-type: none"> <li>➤ Board diversity and structure</li> <li>➤ Independent directors</li> <li>➤ Independent leadership</li> <li>➤ Board skills</li> <li>➤ Separation of Chairman and CEO</li> <li>➤ Political lobbying and donations</li> <li>➤ Tax strategy</li> <li>➤ Bribery and corruption</li> <li>➤ Remuneration</li> <li>➤ Executive pay</li> <li>➤ Shareholder rights</li> <li>➤ Accounting and auditing quality</li> </ul>

*Source: Principles of Responsible Investment (2021)*

**3.10.5. Mission-based Investment**

The terms mission-based investment and socially responsible investment are used interchangeably. Mission-based investments are also known as mission-related investing or mission investing (MI). It originated in the US. The focus is to gain financial returns and positively impact society and the environment. Mission-based investments invest in social and environmental projects to satisfy economic and philanthropic objectives. Mission-based investment approach used by non-profit organizations to integrate their missions into investment decisions. MI uses screening, shareholder advocacy and proactive mission investing to accomplish its missions. Proactive mission investing means investment in social or environmental projects (Fritz & von Schnurbein, 2015)

### **3.10.6. Green Finance**

Green finance or climate-smart finance aims at sustainable growth and development. It consists of green bonds, green funds, financial products of green banks and all financial instruments or products employed in green or eco-friendly projects. The primary target of green financing is to reduce carbon emissions and other greenhouse gases by mitigating climate risk and maintaining long-term environmental well-being (Jha & Bakhshi, 2019).

### **3.10.7. Green Investment**

Integrating environmental aspects into financial analysis is known as green investment. It aims to conserve natural resources, use alternative energy sources, reduce carbon emissions and greenhouse gases, implement green initiatives and projects and develop environmentally friendly technologies (Osman et al., 2019).

### **3.10.8. Green Governance**

The increased environmental consequences of human intervention and issues caused by business firms on the environment led to the emergence of green governance. Green governance is a growing area of interest for investors, regulators, researchers and the financial market. It is the integration of environmental factors into governance. Green governance aims at sustainable development through innovative methods and techniques. It is the management of resources sustainability, which is the management of economic and non-economic resources sustainably. The implementation of green governance requires equal support from the government, business firms, non-profit organizations and the general public (Li et al., 2018).

### **3.10.9. Thematic Investing**

Thematic investing refers to investing in themes such as sustainable development, energy conservation and rural development. Thematic mutual funds allocate 80% of its assets to specific industries. Thematic funds are highly risky. Socially responsible investment is a thematic investment.

### **3.10.10. Triple Bottom Line**

Sustainability is the key to the future. The ‘triple bottom line’ concept of sustainability is based on three parameters: economic, social, and environmental. It is the concept of combining profit with people and the planet, known as the 3Ps, introduced by John Elkington in 1994. The triple bottom line is an accounting framework measuring financial, social and environmental performance. It encourages the accomplishment of sustainable goals and, thereby, sustainable development. The concept grasped the attention of business, non-business and government organizations (Slaper & Hall, 2011). The concept is that any business firm’s stability and growth depend on its financial, environmental and social performance. In recent years, the concept has gained attention from internal and external business stakeholders (Norman & MacDonald, 2004).

### **3.11. CSR and SRI**

The concept of CSR is derived from philanthropy. It is the contribution to philanthropic activities by the companies, including charity, donations, community development and other contributions to the development of society. CSR is an umbrella term that includes the triple bottom line, corporate sustainability, corporate citizenship, and business responsibility. The CSR clause of the Companies Act 2013 emphasizes the role of CSR towards social and environmental well-being. It also emphasizes the economic performance of companies. This indicates the link between CSR and the triple bottom-line approach. Through CSR activities, companies try to ensure the well-being of internal and external stakeholders (PwC Handbook on CSR in India, 2013).

According to Howard Bowen, father of CSR, “CSR is the obligations and actions of business towards accomplishing societal values and objectives”.

World Business Council for Sustainable Development (WBCSD) defines CSR as “the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large.”

Recently, academic and general public interest in matters relating to CSR and corporate reporting has increased significantly (Nath et al., 2013). Several studies suggest that investors consider CSR an essential factor in investment decision-making and encourage companies to undertake CSR initiatives. CSR-related reports are frequently used to evaluate the profitability and efficiency of businesses. This is one of the significant factors in the development of socially responsible investment. Socially responsible investment can be considered a tool for financial institutions to achieve their corporate social responsibility (Chamorro-Mera and Palacios-González, 2019; Louche, 2009).

According to the stakeholder theory of CSR, the growth and survival of any firm depends on how it treats its stakeholders. The stakeholders of a business are categorized into internal and external stakeholders. Internal stakeholders include the owners and employees and external stakeholders include customers, suppliers, government and other regulatory authorities, creditors and society. The firm should achieve financial and non-financial objectives to satisfy external and internal stakeholders. The firm should generate an adequate return on investment to achieve the profit and wealth maximisation objectives while improving its corporate social performance (Gupta, 2011).

Schwartz and Carroll's (2003) intersecting circles model of CSR also suggests that CSR activities should incorporate ethical, legal and moral aspects in addition to economic aspects. The Concentric circle model of CSR also includes ethical, legal, philanthropic and economic aspects. The other models of CSR also give weightage to corporate social performance and ethical and philanthropic aspects (Chufama et al., 2021).

The investors convey their SRI concerns to management through engagement. The increased concerns of investors on ESG issues and SRI encourage corporates to improve their CSR practices. (Sparkes & Cowton, 2004). In turn, companies' CSR initiatives attract socially responsible investors to select these companies' portfolios.

SRI is also seen as an investing strategy with a non-profit motivation that prioritises corporate social responsibility (CSR) activities more than financial return. Compliance with social and environmental parameters can enhance operational

efficiency, reputation, long-term stability and return of firms (Yen et al., 2019). The CSR ensures the social and environmental performance of business firms.

Corporate sustainability originated from the concept of sustainable development. It is the role of a business firm in sustainable development. CSR deals with profits after they have been generated, and corporate sustainability deals with how these profits are generated; thus, the concept of corporate sustainability is much vaster than that of CSR. The principles advocated by 'National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business' in 2011 include CSR and corporate sustainability guidelines. Globally, these two concepts of CSR and corporate sustainability are considered interlinked. Both CSR and corporate sustainability aim to protect the interests of business stakeholders and do business sustainably (PwC Handbook on CSR in India, 2013).

SRI and CSR can be regarded as “the two sides of the same coin”. The sustainable activities of a company can be evaluated by looking into its CSR initiatives; CSR is a company’s response to ESG issues. Today, CSR has become a crucial element of most of the corporate governance codes all over the world. CSR depicts a corporation’s relationship with its various stakeholders and the external environment. An organization with a clear CSR agenda will always look into its actions that may affect social and environmental factors. There is always a link between CSR and SRI; thus, SRI tactics enhance an organization’s CSR output (Khan, 2022). Thus, both concepts are interconnected.

### **3.12. Institutional Framework for the Promotion of SRI**

Globally, SRI is one of the well-established capital market segments as investors, consumers, corporate sector, financial institutions, regulatory authorities, and financial intermediaries recognise the positive return that can be generated by incorporating ESG parameters into investment. Now, SRI is also gaining scant attention internationally and nationally, and institutional and retail investors have started to give more importance to social responsibilities performed by companies. The following are the institutions for the promotion of SRI.



### **3.12.1. Global Sustainable Investment Alliance (GSIA)**

Global Sustainable Investment Alliance (GSIA) aims to develop socially responsible investment globally. It focuses on sustainable development through financial services. The members of GSIA are from North America, Europe and Asia-Pacific region. The GSIA and its alliance members work together for the global development of sustainable finance through advocating rules and regulations, creating awareness on SRI, conducting research and development, and collaborating among the members to promote the implementation of SRI best practices. The members of GSIA include The European Sustainable Investment Forum (Eurosif), Responsible Investment Association Australasia (RIAA), Responsible Investment Association Canada (RIA Canada), UK Sustainable Investment & Finance Association (UKSIF), the Forum for Sustainable & Responsible Investment (US SIF), Dutch Association of Investors for Sustainable Development (VBDO) and Japan Sustainable Investment Forum (JSIF). The Eurosif promotes sustainable and responsible finance in the UK and European Economic Area (EEA). RIAA promotes sustainable, ethical, and impact investing in Australia and New Zealand. VBDO is an independent association of institutional and retail investors and NGOs that integrates ESG factors in companies (Global Sustainable Investment Alliance, 2022).

### **3.12.2. UN Environment Programme Finance Initiative (UNEP FI)**

The UNEP (United Nations Environment Programme) and the global finance sector jointly initiated the UN Environment Programme Finance Initiative (UNEP FI), intending to link sustainable development with the global financial sector. It encourages sustainable business practices across financial institutions (Biermans et al., 2014).

UNEP FI is headquartered in Geneva and launched in 1991. It is considered the first voluntary international code of conduct for SRI. To assist banks in dealing with environmental issues, the UNEP FI introduced its first code of conduct titled the Statement by Banks on Environment and Sustainable Development in 1992. Afterwards, it introduced a code of conduct under the same theme for the insurance sector and all financial institutions. The pivotal objective of UNEP FI is to promote SRI globally, conduct research, and educate the finance sector about SRI. It combines

public and private institutions, venture capital finance, commercial banks, asset management companies and other signatories (Richardson, 2015).

### **3.12.3. Global Reporting Initiative (GRI)**

Global Reporting Initiative (GRI) was introduced in 1997 for non-financial reporting. It is headquartered in Amsterdam. It is an initiative of both UNEP and the Coalition for Environmentally Responsible Economies (CERES) to guide companies and other institutions in preparing sustainability reporting. It is a globally accepted sustainability reporting framework. The guidelines issued by GRI in 2006 are known as G-3, third-generation guidelines for sustainability reporting. This G-3 comprises guidelines and principles for reporting and disclosing environmental issues (Richardson, 2015). It also enables companies to report social and corporate governance performance.

### **3.12.4. UN Global Compact**

In 2000, the UN Global Compact was launched to attain the SDGs through more responsible and accountable business practices. The United Nations' former Secretary-General, Kofi Annan, was the mastermind responsible for forming the UN Global Compact. In search of methods for integrating ESG issues into capital market investment, he invited more than fifty CEOs of prominent financial organizations. (Narayanan & Sirigauri, n.d.).

As a result of this gathering, on 26th July 2000, the UN Global Compact commenced its operations. It is headquartered in New York City, New York. The nine principles of the UN Global Compact originated from the Rio Declaration on the Environment and Development, the ILO Tripartite Declaration of Fundamental Principles and Rights at Work and the Universal Declaration of Human Rights (Campagna, 2004).

It encourages prohibiting child labour, environmental protection, human rights protection, anti-corruption and anti-bribery through coordinating corporate strategies with sustainability (Biermans et al., 2014.).

### **3.12.5. Collevocchio Declaration**

Collevocchio Declaration was crafted in 2003 by Non-Governmental Organizations. It is an alternative business-friendly code of conduct for financial institutions. It contains six principles and is considered a more trustworthy code of conduct since it was prepared by NGOs. The aims of the Collevocchio Declaration include transparency, accountability, good corporate governance, a sustainable market, responsibility and commitment to sustainability by the financiers. The declaration aims to take preventive actions to ensure sustainable development (Richardson, 2015).

### **3.12.6. UN Principles for Responsible Investment**

The United Nations Principles for Responsible Investment provides voluntary guidelines for integrating environmental, social and corporate governance parameters into investment decisions. It is developed for institutional investors to promote SRI. UNPRI aims to develop a more prosperous world through sustainable investment with the help of more responsible investors. The UNPRI supports investors by providing guidelines for suitable screening strategies for investing sustainably. It also conducts research and analysis for building sustainable financial systems and collaborates with other companies to solve ESG-related issues.

United Nations Former Secretary-General Kofi Annan laid the foundation for PRI in 2005 with the help of the world's large institutional investors. The PRI has been continuously backed by the United Nations (UN) since its inception and receives funds from the signatories through annual membership fees. International organisations and governments also support PRI in mobilising funds (Biermans et al., 2014).

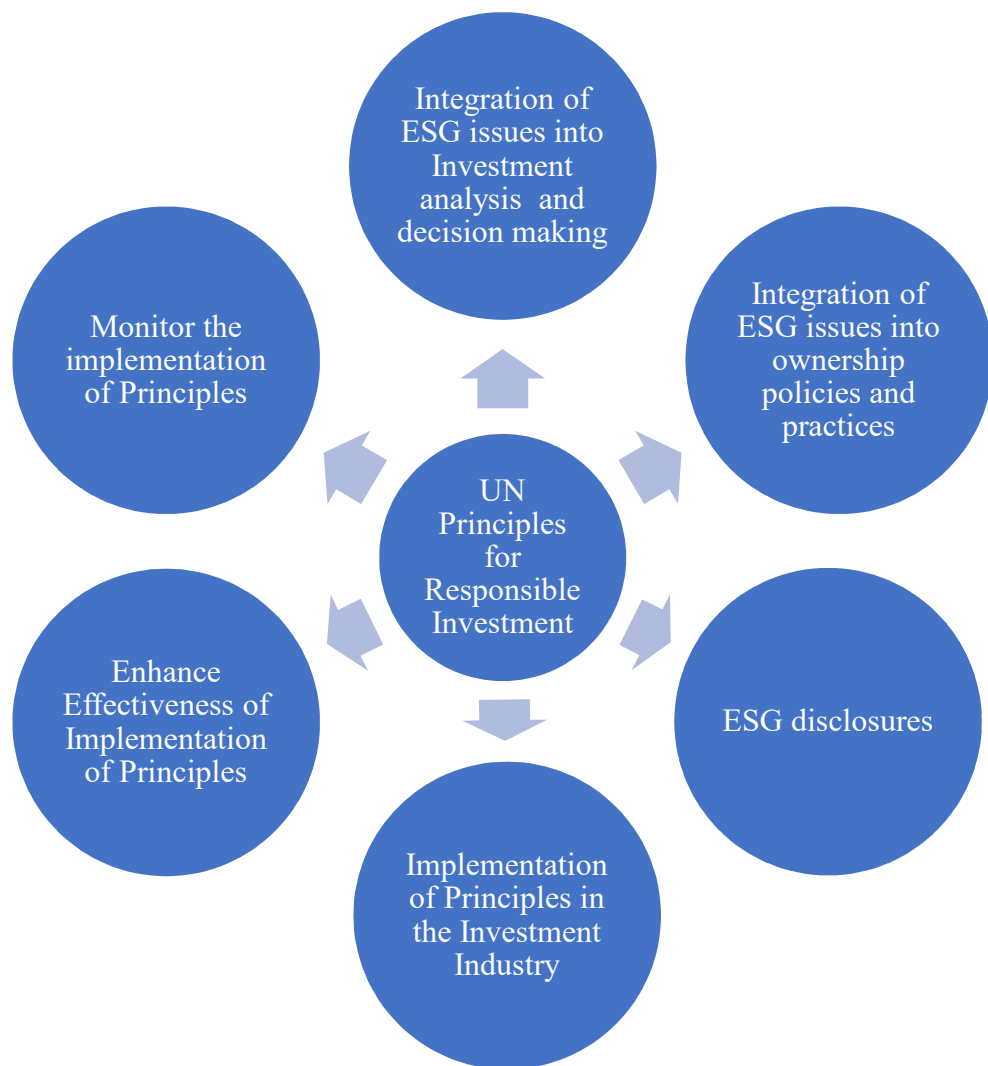
A groundbreaking research paper released by the Global Compact named 'Who Cares Wins' in 2004 and a study titled 'Freshfield Report' released by UNEP served as the cornerstone for developing the fundamental principles of UNPRI (Narayanan & Sirigauri, n.d.). The peculiarity of these principles is that they contain thirty-five possible actions for implementing them (Richardson, 2015).

### 3.12.6.a. Principles of UNPRI

The six core principles of UNPRI are illustrated in Figure 3.1 below.

#### Principles of UNPRI

Figure 3.1

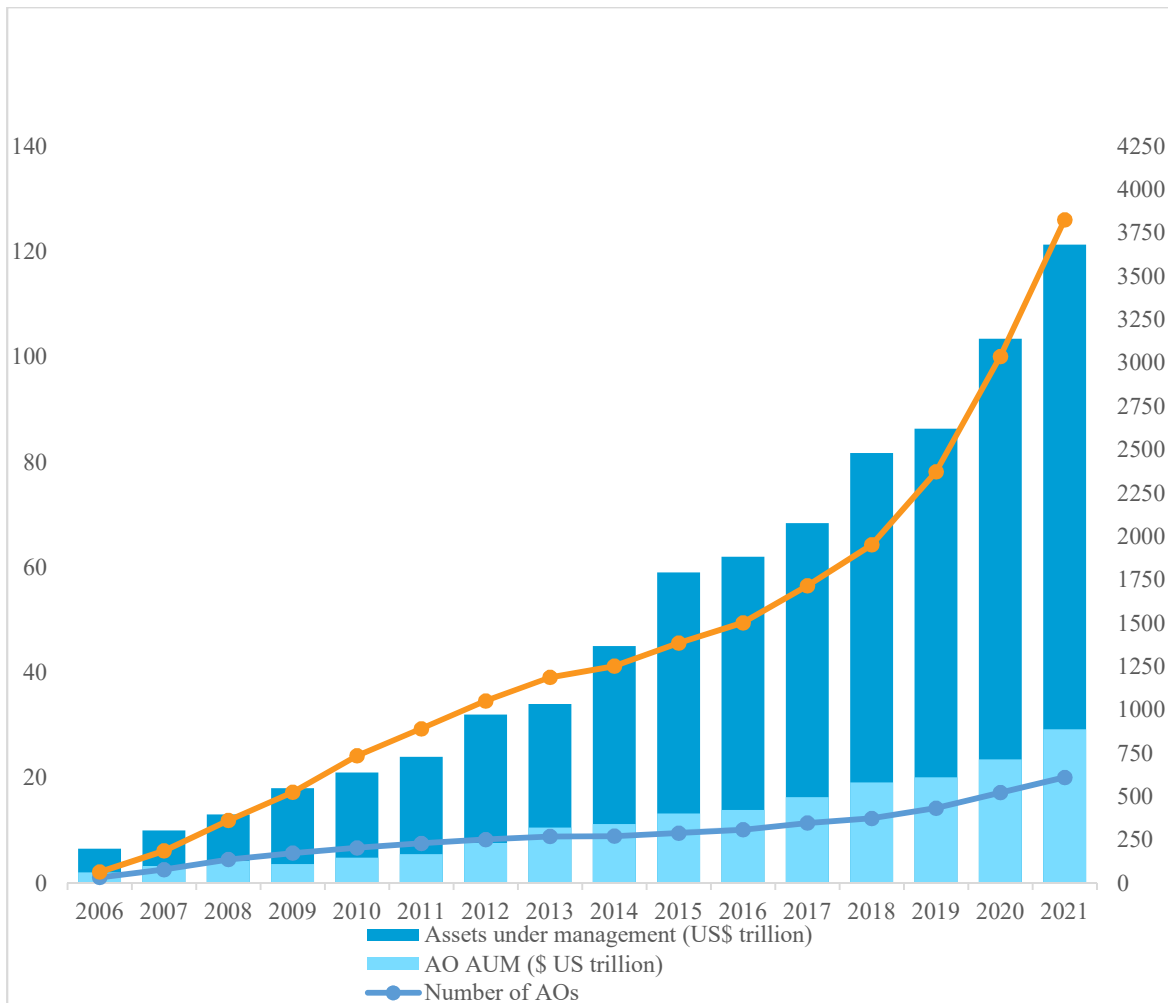


*Source: Principles of Responsible Investment (2021)*

### 3.12.6. b. PRI Signatory Growth

Figure 3.2 shows the PRI signatories' growth from its inception to 2021.

**Figure 3.2**  
**PRI Signatory Growth**



Source: Principles of Responsible Investment (2021)

As per the latest report of United Nations Principles of Responsible Investment (UNPRI), Assets under management of sustainable investment stood at US\$ 121.3 trillion in 2021 and the number of signatories increased from 63 in 2006 to 3826 in 2021.

### 3.12.7. UN Norms on the Responsibilities of Transnational Corporations

UN Norms on the Responsibilities of Transnational Corporations were introduced to ensure the protection of human rights and fundamental freedoms of human resources by transnational corporations. It also deals with consumer protection and labour standards. It encourages transnational corporations, including investment

companies and other financial intermediaries, to contribute towards sustainable development. It also encourages transnational corporations to operate to benefit society and the environment (Richardson, 2015).

### **3.12.8. The Task Force on Climate-Related Financial Disclosures (TCFD)**

The Financial Stability Board (FSB) launched the Task Force on Climate-Related Financial Disclosures (TCFD) 2015 for voluntary disclosure of climate-related risks and opportunities. It promotes climate-related financial disclosure of companies. It has 32 members who create a uniform structure to disclose climate-related financial information (WFE Sustainability Principles October, 2018).

### **3.12.9. Sustainable Stock Exchange (SSE)**

UN former Secretary-General Ban Ki-moon launched the SSE initiative in 2009. The research paper released by the Global Compact named 'Who Cares Wins' in 2004 and a study titled 'Freshfield Report' released by UNEP acted as the foundation for the initiation of the Sustainable Stock Exchange (SSE) in 2007 (Narayanan & Sirigauri, n.d.).

Sustainable Stock Exchange (SSE) is an initiative of UNCTAD to promote ESG investment by the stock exchanges. Along with UNCTAD, UNEP FI, UN PRI, WFE (World Federation of Exchanges), the International Organization of Securities Commissions (IOSCO) and the UN global compact have contributed towards developing SSE. Sustainable Stock Exchange (SSE) ensures ESG disclosures and reporting of companies. To promote corporate sustainability and sustainable development, the Sustainable Stock Exchange takes active efforts, such as awareness programs on sustainability, ESG reporting and disclosures and sustainability-themed indices. Stock exchanges are essential in attaining Sustainable Development Goals (SDGs). The stock exchanges can provide support to the Gender Equality goal of SDGs by giving equal importance and participation to women in all positions and decisions, by promoting job opportunities, creative, innovative and productive activities and growth and development initiatives; stock exchanges are capable of assisting Decent Work and Economic Growth goal of SDGs. By encouraging ESG reporting and disclosures of listed companies, stock exchanges can support the sustainability information goal of SDGs.

Stock exchanges can support SDGs' climate change goals by creating awareness to reduce carbon emissions and other ways to reduce climate risks. It can also integrate and transfer resources, knowledge, technical expertise and sustainable development worldwide and can aid in accomplishing the Global Partnership goal of SDGs (Egurla & Kiran, 2018).

BSE is the pioneer stock exchange from Asia to collaborate with the SSE initiative; later, NSE also collaborated with the SSE initiative. As part of the Sustainable Stock Exchange (SSE) initiative, BSE introduced three sustainability-themed indices: BSE GREENEX, BSE CARBONEX and BSE 100 ESG Index (Egurla & Kiran, 2018).

### **3.13. The International Codes of Conduct for Socially Responsible Investment**

Richardson (2015) listed the voluntary codes of conduct for socially responsible investment and presented them in Table 3.2.

**Table 3.2**

**The International Codes of Conduct for Socially Responsible Investment**

<b>Code of Conduct</b>	<b>Principal Sponsor</b>
CERES Principles	Coalition for Environmentally Responsible Economies
Collevocchio Declaration	Coalition of non-governmental organizations
Global Sullivan Principles	Reverend Leon Sullivan
London Principles of Sustainable Finance	UK Department of Environment and Corporation of London
UN Global Compact	United Nations
UN Principles of Responsible Investment	UN Environment Program Finance Initiative
UN Statement by Financial Institutions on the Environment and Sustainable Development	UN Environment Program Finance Initiative
UN Norms on the Responsibilities of Transnational Corporations	UN Sub-Commission on Promotion and Protection of Human Rights

*Source: Richardson (2015)*

### **3.14. Socially Responsible Investment- Regulatory Framework in India**

There is no prevalent specific legislation to govern ESG investment in India, but the Companies Act, 2013, Environment Protection Act, 1986, SEBI Regulations, 2015, Factories Act, 1948, Prevention of Corruption Act, 1988 and Prevention of Money Laundering Act, 2002; lays down the various rules, regulations and guidelines of ESG investment in India.

The Ministry of Corporate Affairs (MCA) is the premier institution dedicated to promoting SRI in India. To integrate socially responsible business practices into Indian companies, the MCA initiated ‘Voluntary Guidelines on Corporate Social Responsibility’ in 2009 and ‘National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business’ in 2011 (Sarangi, 2021).

The Business Responsibility Report (BRR) incorporates ESG reporting and was introduced in 2012. The BRR was introduced by SEBI’s National Voluntary Guidelines (NVGs) on Social, Environmental and Economic Responsibilities of Business as issued by MCA. As per this disclosure, the top 100 listed companies (by market capitalization) must attach BRR in their annual reports; later, it is extended to 500 listed companies. The business is responsible for the environment, society, and the economy; this is the crux of BRR. The Business Responsibility Report (BRR) was replaced by the Business Responsibility and Sustainability Report (BRSR) in May 2022. The BRSR was introduced by the Indian Institute of Corporate Affairs (IICA) in 2018. As per the Business Responsibility Sustainability Report, it is mandatory to disclose the ESG initiatives of the top 1000 listed companies in the annual report from the financial year 2022-23. ESG reporting is voluntary for other companies in India. The adherence to the principles of SDGs by the Indian corporates is ensured through this Business Responsibility Sustainability Report and the principles of the National Guidelines on Responsible Business Conduct (NGRBC) by the Ministry of Corporate Affairs (MCA), and the United Nations Guiding Principles of Business and Human Rights are also followed in the Business Responsibility Sustainability Report.

The Companies Act 2013 insisted on mandatory CSR committees on the Board (Narayanan & Sirigauri, n.d.). The Companies Act 2013 encouraged ESG investment



by including the New Corporate and Social Responsibility Rule 2014. According to the Companies Act 2013, companies must spend at least 2% of their average net profits over the preceding three years on CSR initiatives.

The Reserve Bank of India (RBI) also made initiatives to promote sustainable business practices in India through primary sector lending, channelizing funds for sustainable infrastructural development and conservation of renewable energy. The country is one of the co-founders of the European Commission-led International Platform on Sustainable Finance (IPSF), established in 2019 (Sarangi, 2021).

India is highly sensitive to environmental issues and climate change risks (Eckstein et al., 2019, as cited in Sarangi, 2021). Attaining SDG goals in India requires the adoption of socially responsible investment. The Indian economy is trying to reduce carbon emissions by 30 per cent by 2050 and to generate 40 per cent of energy from non-fossil fuel sources by 2030. Many giant corporate leaders in India, including Infosys, Tata Motors, Mahindra and Mahindra and other large corporates, voluntarily started to use renewable energy sources. These big corporate houses got recognition as constituents of Dow Jones Sustainability World Index. The Dow Jones Sustainability World Index represents the global sustainability leaders. These efforts show the growing thirst for sustainable investment in India (Sarangi, 2021).

Bombay Stock Exchange makes active efforts to promote sustainable business practices by the listed companies and it also promotes sustainability awareness and encourages ESG reporting disclosures (WFE Annual Sustainability Survey, 2019).

In 2016, SEBI issued national-level guidelines for green bond issuance. In May 2022, SEBI constituted an ESG advisory committee for standardising the framework for regulating ESG investing in India and issuing guidelines for more efficient ESG rating and disclosures (consultation paper on ESG disclosures, ratings and investing, n.d.).

India's ESG segment currently amounts to \$30 billion, which is anticipated to reach \$240 billion within the next ten years (Narayanan & Sirigauri, n.d.).

### **3.15. SRI Disclosures and Reporting**

One of the essential requirements of SRI is ESG disclosures and reporting. In certain countries, ESG reporting and disclosures are mandatory; for others, it is voluntary. These reporting and disclosures provide ESG-related information to investors, corporations, the government, the general public, and other stakeholders (PWC, 2020, as cited in Sarangi, 2021).

The primary threat of SRI is greenwashing. Greenwashing refers to misleading investors, consumers, or the general public by a company or group of companies that they are producing environmentally friendly products or that their activities positively impact the environment. Thus, the need for sustainable disclosure and reporting of companies has increased due to greenwashing.

One reason behind the lack of confidence in investors in SRI is that there is no standardized method for ESG reporting and it needs more quality of ESG data. To solve this problem, the UN has introduced ESG toolkits for member countries to frame ESG-related policies. The Global Reporting Initiative (GRI) has also introduced global standards for sustainability reporting for companies (Sarangi, 2021).

Sustainability reporting requires reliability and uniformity in ESG standards. Otherwise, the scope for comparison will be limited. The other limitation of sustainability reporting is that there is no single international institution to coordinate sustainability reporting. For the development of sustainable investment, UNCTAD established the Global Sustainable Finance Observatory.

### **3.16. ESG Rating**

ESG rating is also referred to as SRI rating, CSR rating, sustainability rating, or social rating. In ESG ratings, the companies are given ratings based on their ESG-related business practices. There are ample international and national institutions that provide ESG data for companies. MSCI, Sustainalytics, Vigeo Eiris, RobecoSAM, Bloomberg, FTSE, and FinScience are some of them. Ratings for businesses may take into account non-financial performance, or they may also take into account financial factors. The Triple Bottom Line (TBL) is the core concept of ESG rating. For rating corporations, it takes into consideration financial, environmental, and social factors.

Morningstar introduced the Morningstar Sustainability Rating for mutual funds in 2016. Mutual funds are ranked based on their sustainable assets in their portfolios. (Sorrosal-Forraddellas et al., 2023). ESG rating agencies work as intermediaries between the business firms and users of information that ESG rating agencies provide information to different stakeholders. The increased rules and regulations on disclosures and reporting of ESG performance and the development of the capital market increased the number of ESG rating agencies. (Escrig-Olmedo et al., 2010).

Sustainability rating examines the companies' compliance with ESG parameters. It evaluates a firm's ability to balance financial return and ESG compliance. Firms with high ESG scores may have better financial returns, good reputations, increased worker morale, innovation, reduced impact of strict rules and regulations, and positive attitudes from other stakeholders. ESG rating enables investors to understand companies' ESG practices better and helps them construct suitable portfolios. Banks and other financial institutions use ESG ratings to determine whether to lend money to or invest in a company based on that company's creditworthiness. The firms use ESG scores to get a third-party performance evaluation and attract investors. There are two kinds of sustainability rating: the investor pay model and the applicant pay model. In the investor pay model, sustainability rating agencies provide ESG ranks to companies and provide ESG ratings to investors. Based on this rating, investors can decide their portfolios. In the applicant pay model, the firms get their relative ESG rating from sustainability rating agencies, enabling them to frame suitable ESG policies. There are several sustainability rating agencies in India. The methodology used by each agency is different from others. They collect ESG data from companies' annual reports, CSR reports, Business Responsibility and Sustainability Report (BRSR), company websites, stock exchange reports and other independent agencies. (Akhileshwari et al., 2021). ESG rating can be used to measure firms' material risk and future growth prospects.

As per the report of the Global Initiative for Sustainability Ratings (2016), there are over 125 ESG data providers. The methodologies used are different for different ESG data service providers. MSCI, OECD, Oekom. These rating agencies

use the ESG reports and disclosures published by the companies to assess the ESG performance (Sinha & Juneja, 2022).

### **3.17. SRI Indices**

SRI indices can be used as a benchmark for evaluating corporates' corporate social responsibility (CSR) initiatives. These indices also provide guidance and reference to investors interested in investing based on the SRI theme. These indices are a yardstick of SRI and play a vital role in developing SRI at a global level. The first SRI-themed index is the Domini Social Index (DSI400); it was introduced in the USA by Amy Domini in 1990. 400 US-based companies are listed in this index based on environmental, social, and ethical parameters. In 1999, Dow Jones started to publish the Sustainability Index. The first emerging economy to integrate sustainability into the stock market was South Africa and in 2003, the Johannesburg Stock Exchange (JSE) in South Africa introduced the SRI index. Later, many research organizations, stock exchanges, and other financial institutions launched SRI indices (Sun et al., 2011). Sustainability indices help make comparative performance analyses of companies based on environmental, social and corporate governance parameters. It differs from other indices because it comprises companies that meet specific scores under ESG parameters and include financial performance. The methodologies used are different for different indices. Globally, Dow Jones Sustainability Indexes (DJSIs) and FTSE4Good Index Series are the most popular sustainability indices (Richardson, 2015). S&P BSE 100 ESG Index, S&P BSE CARBONEX, S&P BSE GREENEX, NIFTY100 ESG Index and the NIFTY 100 Enhanced ESG Index are the sustainability-themed indices in India.

### **3.18. Chapter Summary**

The chapter summarizes the conceptual and theoretical background for the study. The chapter discussed various definitions of socially responsible investment, concepts and aspects of SRI, the history of SRI and its current status and the regulatory framework for SRI globally and nationally. The chapter also discussed, in detail, the strategies and practices for integrating social responsibility and ESG factors into investment. The last part of this chapter deals with ESG rating disclosure and various sustainability-themed indices.

## References

- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2022). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemicae Meridionalis*, 24(3), 95–106. <https://doi.org/10.32725/acta.2021.014>
- Asvathitanont, C., & Tangjitprom, N. (2020). The Performance of Environmental, Social, and Governance Investment in Thailand. *International Journal of Financial Research*, 11(6), 253-261. <https://doi.org/10.5430/ijfr.v11n6p253>
- Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27(11), 1101–1122. <https://doi.org/10.1002/smj.557>
- Bennett, M. S., & Iqbal, Z. (2013). How socially responsible investing can help bridge the gap between Islamic and conventional financial markets. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(3), 211–225. <https://doi.org/10.1108/IMEFM-Aug-2012-0078>
- Berry, T. C., & Junkus, J. C. (2013). Socially Responsible Investing: An Investor Perspective. *Journal of Business Ethics*, 112(4), 707–720. <https://doi.org/10.1007/s10551-012-1567-0>
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York, NY: Harper
- Bruin, B. de. (2013). Socially Responsible Investment in the alcohol industry: an assessment of investor attitudes and ethical arguments. *Contemporary Social Science*, 8(1), 58-70. <https://doi.org/10.1080/21582041.2012.751494>
- BSE. (n.d.). *Guidance Document on ESG Disclosures*.
- Camilleri, M. A. (2017). Socially Responsible and Sustainable Investing. *Corporate Sustainability, Social Responsibility and Environmental Management*, (61- 77). <https://www.researchgate.net/publication/329059833>
- Campagna, J. (2004). United Nations Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights: The International Community Asserts Binding Law on the Global Rule Makers. *UIC Law Review*, 37(4), 1205-1252.
- Capital Group. (2022). *ESG Global Study*.
- Caplan, L. (2013). *From SRI to ESG: The Changing World of Responsible Investing*. Commonfund Institute.
- Chamorro-Mera, A., & Palacios-González, M. M. (2019). Socially responsible investment: An analysis of the structure of preferences of savers. *Corporate Social Responsibility and Environmental Management*, 26(6), 1423–1434. <https://doi.org/10.1002/csr.1757>
- Chaubey, D. S., Dev, R., & Patra, S. (2016). A study on the ethical considerations in investors' investment decisions. *Splint International Journal of Professionals*, 3(5), 7-16.

- Chowdhury, M. A. F., & Masih, M. (2015). *Socially responsible investment and Shariah-compliant investment compared: Can investors benefit from diversification? An ARDL approach*.
- Chufama, M., Sithole, F., & Utaumire, Y. (2021). A Review of Corporate Social Responsibility Theories and Models. *International Journal of Economics, Commerce and Management*, IX (3), 104-119. <https://www.researchgate.net/publication/350090115>
- Confederation of Indian Industry. (2013). *PwC Handbook on Corporate Social Responsibility in India 2013*.
- Daugaard, D. (2020). Emerging new themes in environmental, social and governance investing: A systematic literature review. *Accounting & Finance*, 60(2), 1501–1530. <https://doi.org/10.1111/acfi.12479>
- Derwall, J., Koedijk, K., & Ter Horst, J. (2010). *A tale of values-driven and profit-seeking social investors*.
- Easton, S., & Pinder, S. (2018). *Theory and empirical evidence on socially responsible investing and investment performance: Implications for fund trustees and their members*. Australian Centre for Financial Studies.
- Egurla, K., & Kiran, V. U. (2018). A Study on Sustainable Stock Exchanges in India and the World. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3992144>
- Escrig-Olmedo, E., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2010). Socially responsible investing: sustainability indices, ESG rating, and information provider agencies. *International Journal of Sustainable Economy*, 2(4), 442-461.
- Eurosif. (2018). *European SRI Study 2018*.
- Fritz, K. J. M. (2020). *Socially Responsible Investments: A Performance Analysis* [Master thesis, Copenhagen Business School].
- Fritz, T. M., & von Schnurbein, G. (2015). *Mission Investing in Europe – A Meta-analysis*. (CEPS Working Paper Series 5).
- Garzón Castrillón, M. A. (2021). The concept of corporate governance. *Visión de Futuro*, 25, No 2 (Julio-Dic), 178–194. <https://doi.org/10.36995/j.visiondefuturo.2021.25.02R.005.en>
- Global Sustainable Investment Alliance. (2022). *Global Sustainable Investment Review*.
- Gössling, T., & Buitter, B. (2017). Socially Responsible Investment Engagement. In R.E. Freeman et al. (Eds.), *Stakeholder Engagement: Clinical Research Cases (Issues in Business Ethics)*, 46, 113-135. Springer International Publishing AG. [https://doi.org/10.1007/978-3-319-62785-4\\_6](https://doi.org/10.1007/978-3-319-62785-4_6)
- GRI. (2016). *Global Initiative for Sustainability Ratings*.
- Gupta, S. (2011). Consumer stakeholder view of corporate social responsibility: A comparative analysis from USA and India. *Social Responsibility Journal*, 7(3), 363–380. <https://doi.org/10.1108/17471111111154518>

- Jansson, M., & Biel, A. (2014). Investment Institutions' Beliefs About and Attitudes Toward Socially Responsible Investment (SRI): A Comparison Between SRI and Non-SRI Management. *Sustainable Development*, 22(1), 33–41. <https://doi.org/10.1002/sd.523>
- Jayasekera, M. A. K. De. S., & Pushpakumari, M. D. (2020). Ethical Banking as an Alternative to Conventional Banking? A Literature Review. *Sri Lankan Journal of Business Economics*, 9(II), 61-79.
- Jha, B., & Bakhshi, P. (2019). Green Finance: Fostering Sustainable Development in India. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 3798–3801. <https://doi.org/10.35940/ijrte.D8172.118419>
- Juetten, S. (2011). *Investors Guide to Socially Responsible and Sustainable Investing*.
- Jun, H. (2018). Corporate governance and the institutionalization of socially responsible investing (SRI) in Korea. *Business Ethics in East Asia*, 135-149. Routledge.
- Kinder, P. D. (2007). *"Socially Responsible Investing": An Evolving Concept in a Changing World*.
- Li, W., Xu, J., & Zheng, M. (2018). Green Governance: New Perspective from Open Innovation. *Sustainability*, 10(11), 2-19. <https://doi.org/10.3390/su10113845>
- Louche, C. (2009). Corporate Social Responsibility: The Investor's Perspective. In S. O. Idowu & W. Leal Filho (Eds.), *Professionals' Perspectives of Corporate Social Responsibility*, 211–231. Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-02630-0\\_12](https://doi.org/10.1007/978-3-642-02630-0_12)
- Michelson, G., Wailes, N., Van Der Laan, S., & Frost, G. (2004). Ethical Investment Processes and Outcomes. *Journal of Business Ethics*, 52(1), 1–10. <https://doi.org/10.1023/B:BUSI.0000033103.12560.be>
- Munusamy, D. (2015). Perception and Awareness of an Ethical Investor's about the Shariah Investment in India. *International Journal of Economic Research (IJER)*, 12(4), 1051-1066. ISSN: 0972-9380. <https://www.researchgate.net/publication/305015566>
- Narayanan, E. A., & Sirigauri, N. (n.d.). *ESG Investing in India*.
- Nath, S. (2021). The Business of Virtue: Evidence from Socially Responsible Investing in Financial Markets. *Journal of Business Ethics*, 169(1), 181–199. <https://doi.org/10.1007/s10551-019-04291-9>
- Norup, A., & Gottlieb, M. (2011). *Socially Responsible Investing: An assessment of the concept on the Danish market* [Master thesis, Copenhagen Business School].
- OECD. (2007). *Recent Trends and Regulatory Implications in Socially Responsible Investment for Pension Funds*.
- Osman, I., Ma'in, M., Muda, R., Amin Husni, N. S., Syed Alwi, S. F., & Hassan, F. (2019). Determinants of behavioural intention towards green investments: The perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16-38.
- Osman, I., Subramaniam, G., Mohamad, S., Hanif, A., Hassan, F., & Yaakob, S. (2020). The adoption of socially responsible investments: Gen Y perspectives. *Malaysian Journal of Consumer and Family Economics*, 194-222.

- Pancholi, G., Pancholi, M., & Saxena, A. (2022). ESG investing: Aligning sustainability with investments. *The Management Accountant*, 47-49.
- Pfotenhauer, R. (2022). *Socially Responsible Investors: The Rise of ESG*. Conference Paper. <https://www.researchgate.net/publication/362323568>
- Pitluck, A. Z. (2008, March 15). *Moral Behavior in Stock Markets: Islamic Finance and Socially Responsible Investment*.
- PRI (Principles for Responsible Investment). (2021). *A Blueprint for Responsible Investment*. <https://www.unpri.org/download?ac=5330>
- Wagstaff, E., & Belsom, T. (n.d.). *An Introduction to Responsible Investment*. Principles of Responsible Investment. <https://www.unpri.org/download?ac=10223>
- Douma, K., Scott, L., & Bulzomi, A. (2017). *The SDG Investment Case*. Principles for Responsible Investment. <https://www.unpri.org/download?ac=5909>
- Biermans, M., Kemeling, E., van Lanschot, W., Chan, F. Y., & Buckley, N. (2014). *Integrating ESG in Private Equity*. Principles for Responsible Investment. <https://www.unpri.org/download?ac=252>
- Richardson, B. (2015). Financial markets and socially responsible investing. *Company Law and Sustainability: Legal Barriers and Opportunities*, 226-273. Cambridge: Cambridge University Press. doi:10.1017/CBO9781107337978.008
- Roca, E., Wong, V. S. H., & Anand Tularam, G. (2010). Are socially responsible investment markets worldwide integrated? *Accounting Research Journal*, 23(3), 281-301. <https://doi.org/10.1108/10309611011092600>
- Roundy, P., Holzhauer, H., & Dai, Y. (2017). Finance or philanthropy? Exploring the motivations and criteria of impact investors. *Social Responsibility Journal*, 13(3), 491-512. <https://doi.org/10.1108/SRJ-08-2016-0135>
- Sarangi, G. K. (2021). *Resurgence of ESG Investments in India: Toward a Sustainable Economy*. Asian Development Bank Institute. ADBI Working Paper Series No. 1284.
- Satya Sekhar, G. V. (2011). Green Funds & Green Investing: A New Route to Green India. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1872370>
- SEBI. (n.d.) *Consultation Paper on ESG Disclosures, Ratings and Investing*.
- SEBI. (n.d.). *Business Responsibility and Sustainability Reporting by listed entities*.
- Shah, M. S. (2018). A Study of Essence of Socially Responsible Investment and Environmental, Social and Governance (ESG)-linked Investment Market in India. *International Journal for Research Trends and Innovation*, 3(8), 215-219.
- Sharma, N. K. (2016). Corporate Social Responsibility Is Not a Charity but a Responsibility in India. *VSRD International Journal of Business and Management Research*, 6(2), 57-62. <https://www.vsrjournals.com>
- Sinha, R., & Datta, M. (2019). Institutional Investments and Responsible Investing. In M. Ziolo & B. S. Sergi (Eds.), *Financing Sustainable Development*, 127-168. Springer International Publishing. [https://doi.org/10.1007/978-3-030-16522-2\\_6](https://doi.org/10.1007/978-3-030-16522-2_6)



- Sinha, R., & Juneja, M. (2022). Environmental, Social, Governance Financing Goals in Post-COVID-19 World. *Journal of Resources, Energy and Development*, 17(2), 31–40. <https://doi.org/10.3233/RED-170203>
- Slaper, T. F., & Hall, T. J. (2011). *The Triple Bottom Line: What Is It and How Does It Work?* Indiana Business Review, Spring.
- Sorrosal-Forradellas, M.-T., Barberà-Mariné, M.-G., Fabregat-Aibar, L., & Li, X. (2023). A new rating of sustainability based on the Morningstar Sustainability Rating. *European Research on Management and Business Economics*, 29(1), 100208. <https://doi.org/10.1016/j.iedeen.2022.100208>
- Sparkes, R. (2002). *Socially Responsible Investment: A Global Revolution*. John Wiley & Sons, Ltd.
- Sparkes, R., & Cowton, C. J. (2004). The Maturing of Socially Responsible Investment: A Review of the Developing Link with Corporate Social Responsibility. *Journal of Business Ethics*, 52(1), 45–57. <https://doi.org/10.1023/B:BUSI.0000033106.43260.99>
- Strong, S. (2010). Development of SRI Funds and Markets. *Journal of Financial Transformation*, 29, 123-130.
- Sun, M., Nagata, K., & Onoda, H. (2011). The investigation of the current status of socially responsible investment indices. *Journal of Economics and International Finance*, 3(13), 676-684. <http://www.academicjournals.org/JEIF>
- The World Bank. (2020). *Resources-Sustainable Development Bonds & Green Bonds: Impact Report 2020*.
- Vandekerckhove, W., & Leys, J. (2007). Information Asymmetries in Socially Responsible Investment. *Philosophica*, 80, 5-19.
- World Federation of Exchanges (WFE). (2018). *WFE Sustainability Principles 2018*.
- World Federation of Exchanges (WFE). (2019). *WFE Annual Sustainability Survey*.
- Yen, M., Shiu, Y., & Wang, C. (2019). Socially responsible investment returns and news: Evidence from Asia. *Corporate Social Responsibility and Environmental Management*, 1-14. <https://doi.org/10.1002/csr.1833>

## Websites

<http://www.eurosif.org/sri>

<http://www.uksif.org/Z/Z/Z/sri/main/index.shtml>

<http://www.unpri.org>

<https://www.gsi-alliance.org>

**CHAPTER 4**  
**COMPARISON OF PERFORMANCE OF SOCIALLY**  
**RESPONSIBLE PORTFOLIOS AND MARKET**  
**PORTFOLIOS**

## **CHAPTER 4**

# **COMPARISON OF PERFORMANCE OF SOCIALLY RESPONSIBLE PORTFOLIOS AND MARKET PORTFOLIOS**

### **4.1. Introduction**

Indian economy is one of the most expanding economies and is developing across several industries. These developments made firms more concerned about society and the environment, along with profit. For the long-term growth and sustainability of the firm, it should satisfy the triple bottom line, namely, profit, planet, and people. SRI is a well-established concept in the global scenario. As the Indian financial market is globally integrated, Indian companies are paying more attention to ESG issues. The increased awareness of ESG issues made Indian companies incorporate ESG aspects into their operations. The concept of social responsibility can be extended to different asset classes like direct equity investment, fixed-income securities, mutual funds, commodities, exchange-traded funds (ETFs), hedge funds, real estate, community investment and microfinance. Different methodologies are used by these investment alternatives for incorporating social responsibility or for ESG integration. In India, there are several social responsibility-themed indices and funds available. Investors wishing to achieve financial and non-financial returns can opt for these funds. The Bombay Stock Exchange (BSE) has three social responsibility-themed indices: the S&P BSE 100 ESG Index, S&P BSE CARBONEX, and S&P BSE GREENEX. The National Stock Exchange (NSE) also offers two social responsibility-themed indices: the NIFTY100 ESG Index and the NIFTY 100 Enhanced ESG Index. SBI Magnum Equity ESG Fund, Tata Ethical Fund, Nippon India Shariah BeEs, Axis ESG Equity Fund, Quantum India ESG Equity Fund, Taurus Ethical Fund, Avendus India ESG Fund, Mirae Asset ESG Sector Leaders ETF, Aditya Birla Sun Life ESG fund, ICICI Prudential ESG Fund, Kotak ESG Opportunities Fund, Quant ESG Equity Fund, Invesco ESG Equity Fund and HSBC Global Equity Climate Change Fund of Fund are the social responsibility themed funds presently offers in India.

## **4.2. Social Responsibility-themed Indices**

A brief explanation of social responsibility-themed indices is provided below:

### **4.2.1. S&P BSE 100 ESG Index**

S&P BSE 100 ESG Index is one of the sustainability-themed indices of the Bombay Stock Exchange and its underlying index is S&P BSE 100. S&P BSE 100 ESG Index is a float-adjusted market capitalization-weighted index. The ESG scores of the companies are used for inclusion in the S&P BSE 100 ESG Index and companies engaged in the business of controversial weapons, thermal coal, tobacco products, oil sands, small arms, and military contracting are excluded from this index. Companies not complying with the principles and guidelines of the United Nations Global Compact (UNGC) are also excluded from the S&P BSE 100 ESG Index. This index was launched on 26<sup>th</sup> October 2017 with the base date as 30/04/2014 and 100 as the base value (Asia Index Private Limited, 2022).

### **4.2.2. S&P BSE CARBONEX**

S&P BSE CARBONEX is another social responsibility-themed index launched on 30<sup>th</sup> November 2012 to mitigate carbon emissions and climate change. S&P BSE 100 is the underlying index of S&P BSE CARBONEX. The companies are included based on their Carbon Performance Scores given by RobecoSAM based on its carbon-adjusted float market capitalization. The carbon policies followed by the companies and their greenhouse gas emissions are also considered for assessing the relative carbon performance of the companies. The base date of S&P BSE CARBONEX is 30<sup>th</sup> September 2010 and the base value is 1000 (S&P Dow Jones Indices, 2014).

### **4.2.3. S&P BSE GREENEX**

S&P BSE GREENEX is also one of the sustainability-themed indices. It was launched on 22<sup>nd</sup> February 2012 to promote sustainable investment in India. The index consists of twenty-five companies chosen from S&P BSE 100 based on low levels of greenhouse gas emissions, low carbon emission, turnover, liquidity, and

market capitalization. The base date of S&P BSE GREENEX is 1<sup>st</sup> October 2008 and the base value is 1000 (Asia Index Private Limited, 2022).

#### **4.2.4. NIFTY100 ESG Index**

NIFTY100 ESG Index is one of the social responsibility-themed indices of the National Stock Exchange. The Nifty 100 index is the base index of the NIFTY100 ESG Index. The companies are included in the NIFTY100 ESG Index based on their environmental, social, and governance risk score. It was launched on 27<sup>th</sup> March 2018 and the base date is 1<sup>st</sup> April 2011, with a base value of 1000. NIFTY100 ESG Index mainly comprises companies from the financial services, information technology, automobile, and auto component sectors. NIFTY100 ESG Index has 89 constituents. Infosys Ltd, Tata Consultancy Services Ltd, HDFC, HCL Technologies Ltd, Bharti Airtel Ltd, ICICI Bank Ltd, Kotak Mahindra Bank Ltd, Titan Company Ltd, Bajaj Finance Ltd, and Tech Mahindra are the top constituents of NIFTY100 ESG Index. The companies engaged in the business of alcohol, tobacco, controversial weapons, and gambling are excluded from the NIFTY100 ESG Index (National Stock Exchange, 2023).

#### **4.2.5. NIFTY 100 Enhanced ESG Index**

NIFTY 100 Enhanced ESG Index is another sustainability-themed index of NSE launched on 27<sup>th</sup> March 2018 with a base date of 1<sup>st</sup> April 2011 and a base value of 1000. Companies in the severe risk category are excluded from the NIFTY100 Enhanced ESG Index. The NIFTY 100 index is the underlying index of the NIFTY 100 Enhanced ESG Index, and companies are selected based on their ESG risk scores. NIFTY100 Enhanced ESG Index consists primarily of companies operating in the financial services, information technology, and automobile and auto component industries. NIFTY100 Enhanced ESG Index has 85 constituents. Infosys Ltd, Tata Consultancy Services Ltd, HDFC, HCL Technologies Ltd, Bharti Airtel Ltd, ICICI Bank Ltd, Kotak Mahindra Bank Ltd, Titan Company Ltd, Bajaj Finance Ltd, and Tech Mahindra are the top constituents of NIFTY100 Enhanced ESG Index (India Index Services & Products Limited, 2018).

#### **4.2.6. MSCI ESG India Index**

MSCI ESG India Index is a social responsibility-themed index that tracks the performance of Indian companies based on environmental, social, and corporate governance parameters. The ESG performance of the companies is compared with that of other companies within the same industry. It comprises large and mid-sized companies. It provides investors with an opportunity to invest with sustainable values. MSCI India ESG Leaders Index is one of the constituents of the MSCI ESG Leaders Index series that seeks companies with robust ESG practices, and it uses a best-in-class approach in selecting companies. MSCI ESG Research, a specialized company that conducts ESG evaluations, provides the data for selecting the companies that are part of this index. The MSCI India ESG Leaders Index is a valuable instrument for investors who prioritise sustainable and socially responsible investments (MSCI, 2023).

### **4.3. Social Responsibility-themed Funds**

A brief explanation of social responsibility-themed funds is provided below:

#### **4.3.1. SBI Magnum Equity ESG Fund**

The SBI Magnum Equity fund has been renamed the SBI Magnum Equity ESG Fund, and this is the first ESG fund in the Indian mutual fund industry. The inception date of SBI Magnum Equity ESG Fund is 1<sup>st</sup> January 2013. It is an open-ended equity scheme suitable for investors who seek long-term capital appreciation. Nifty 100 ESG TRI is the benchmark index for SBI Magnum Equity Fund and S&P BSE Sensex TRI is the additional benchmark. This fund invests in companies based on ESG criteria and uses negative screening, best-in-class approach, and ESG integration approach to select companies to portfolio. The prominent industries that comprise a major part of SBI Magnum Equity Fund are financial services, information technology, automobile, and auto components (SBI Mutual Fund, 2023).

#### **4.3.2. Tata Ethical Fund**

Tata Ethical Fund is an open-ended equity scheme based on Shariah principles. It was launched on 24<sup>th</sup> May 1996. Nifty 500 Shariah TRI is the

benchmark index for Tata ethical fund. This fund is for individuals who expect long-term capital appreciation. Tata Ethical Fund invests 80% to 100% of its investments in equity and equity-related financial instruments and sectors that comply with Shariah principles. It is a thematic fund and avoids sin stocks and sectors from its portfolio. Tata Ethical Fund also excludes banking and financial sector companies from its portfolio and includes low-leveraged companies with a good track record of profit and strong capital structure. It excludes investment in alcoholic beverages, gambling, pork, non-halal food products, adult content, the weapon or ammunition sector, hospitality or hotels and other sin stocks (Tata Mutual Fund, 2023).

#### **4.3.3. Nippon India Shariah BeEs**

Nippon India Shariah BeEs is an open-ended index exchange-traded fund listed in NSE and BSE. Nifty 50 Shariah TRI is the benchmark index of Nippon India Shariah BeEs. This ETF invests in stocks that are part of the Nifty 50 Shariah Index in the same proportion as they are included in the index. The ETF was launched on 18<sup>th</sup> March 2009. This financial instrument suits investors who expect long-term capital appreciation (Nippon India Mutual Fund, 2021).

#### **4.3.4. Axis ESG Equity Fund**

Axis ESG Equity Fund is a sustainability-themed open-ended equity fund launched on 12<sup>th</sup> February 2020. This fund aims to provide long-term capital appreciation to investors by investing in socially responsible companies. The primary objective of the Axis ESG Equity fund is sustainable growth. The top sectors of this fund include financial services, consumer services, information technology, FMCG, power and health care. Axis ESG Equity fund selects companies based on a comprehensive ESG assessment process and annually reviews the companies' ESG performance.

Furthermore, the fund takes an active approach in engaging with the management of the companies it invests in to improve disclosures and proxy voting, as well as identify and address any specific ESG issues that may arise within the companies. By actively engaging with the management of its portfolio companies, the fund seeks to influence positive change and promote sustainable practices that align

with its ESG principles. Nifty 100 ESG TRI is the benchmark index of Axis ESG Equity fund (Axis Mutual Fund, 2023).

#### **4.3.5. Quantum India ESG Equity Fund**

The Quantum India ESG Equity Fund is a thematic fund focused on socially responsible investing, which means it invests in companies that meet specific environmental, social, and governance standards set by the fund. The fund is designed for investors looking for long-term capital appreciation and was launched on 12<sup>th</sup> July 2019. The benchmark index for Quantum India ESG Equity Fund is the NIFTY100 ESG Total Return Index (Quantum Mutual Fund, 2023).

#### **4.3.6. Taurus Ethical Fund**

Taurus Ethical Fund is an open-ended equity-oriented scheme launched on 6<sup>th</sup> May 2009. This fund is suitable for investors expecting long-term capital appreciation. Taurus Ethical Fund invests in equity and equity-related financial instruments that comply with Shariah principles. It is a social responsibility-themed fund diversified over Shariah-based stocks and sectors. S&P BSE 500 Shariah index is the benchmark index of the Taurus Ethical Fund. Companies and sectors engaged in alcohol, tobacco, gambling, adult entertainment, breweries, distilleries, pork, related businesses and other sin stocks are excluded from the Taurus Ethical Fund (Taurus Mutual Fund, 2023).

#### **4.3.7. Avendus India ESG Fund**

The Avendus India ESG Fund is a fund that focuses on social responsibility and invests only in companies that follow environmentally sound, socially responsible, and well-governed policies. It is designed for investors seeking long-term capital appreciation and is an open-ended fund that attracts domestic and international investors. The fund primarily invests in equity-based securities but also considers environmental, social, and governance factors in its financial analysis to provide risk-adjusted returns to investors over the long term. The Avendus India ESG Fund is an investment fund that invests only in companies that follow socially responsible policies (Avendus, 2019).



#### **4.3.8. Mirae Asset ESG Sector Leaders ETF**

Mirae Asset ESG Sector Leaders ETF (MAESGSLETF) is an open-ended Exchange Traded Fund (ETF) that aims at generating returns that are commensurate with the performance of the NIFTY100 ESG Sector Leaders Total Return Index after accounting for expenses and tracking error. The benchmark index for MAESGSLETF is the NIFTY100 ESG Sector Leaders Total Return Index. This ETF was launched on 17<sup>th</sup> November 2020 and this fund aims to provide high returns to investors with less volatility. An ETF that follows an ESG investment strategy would typically avoid investing in companies that do not adhere to sound environmental, social, and governance policies. Mirae Asset ESG Sector Leaders ETF is listed in NSE and BSE (Mirae Asset Mutual Fund, 2021).

#### **4.3.9. Aditya Birla Sun Life ESG fund**

Aditya Birla Sun Life ESG fund is a social responsibility-themed open-ended equity scheme that invests in companies that follow sound environmental, social, and governance policies and practices. The fund was launched on 24<sup>th</sup> December 2020 and is a better option for investors who expect long-term capital appreciation. Nifty 100 ESG TRI is the benchmark index for Aditya Birla Sun Life ESG fund. This fund has a high-risk profile. The fund collects ESG data from primary and secondary sources, analyses it qualitatively and quantitatively, and then rates companies according to their ESG risk score. Additionally, the fund motivates companies to make ESG reporting more transparent. A significant portion of Aditya Birla Sun Life ESG fund is comprised of major sectors, including banks, IT software, consumer durables, and retailing (Aditya Birla Capital Mutual Fund, 2021).

#### **4.3.10. ICICI Prudential ESG fund**

ICICI prudential ESG fund is an ESG-based fund that promotes sustainable investing by investing in companies that adhere to the principles of environmental, social, and governance (ESG) parameters. The primary objective of the fund is to create a positive impact on the environment and society by investing in high-quality companies that have sustainable business practices and strong ESG credentials. By investing in companies focusing on sustainability and responsible business practices, the fund seeks to generate long-term value for its investors while promoting positive

change in the world. The NIFTY 100 ESG index is the benchmark for ICICI's prudential ESG fund. The aims of this fund include investing in companies with high ESG scores, avoiding investment in sin stocks such as alcohol, tobacco, weapons, pornography and gambling, conducting internal research on the ESG performance of companies for inclusion to fund, shareholder activism to improve sustainable performance (Edelweiss, Bank of America, Morgan Stanley, 2020).

#### **4.3.11. Kotak ESG Opportunities Fund**

Kotak ESG Opportunities Fund is an open-ended equity scheme. The investment approach of this fund is to select companies for investment that adhere to environmental, social, and governance (ESG) criteria in their business operations. Nifty 100 ESG Index TRI is the benchmark index for Kotak ESG opportunities fund. Kotak ESG opportunities fund primarily invests in major sectors, including financial services, information technology, automobile and auto components and construction materials, which account for a considerable proportion of the fund's holdings. 11<sup>th</sup> November 2020 is the date of inception for the Kotak ESG Opportunities fund (Kotak Mutual Fund, 2020).

#### **4.3.12. Quant ESG Equity Fund**

Quant ESG Equity Fund is a sustainability-themed fund launched on 5<sup>th</sup> November 2020 as an open-ended equity scheme. Nifty 100 ESG Index TRI is the benchmark index for Quant ESG equity fund. This fund follows an investment approach that involves selecting investment companies based on compliance with environmental, social, and governance (ESG) criteria in their business operations. Quant ESG equity funds avoid investment in sin stocks and use screening and exclusion strategies in selecting the portfolio (Quant Mutual Fund, 2023).

#### **4.3.13. Invesco ESG Equity Fund**

Invesco ESG equity fund is an open-ended equity fund that primarily focuses on investing in companies that operate by ESG parameters. This fund is well-suited for investors prioritising sustainable investment and seeking long-term capital appreciation. The fund was launched on 26<sup>th</sup> February 2021. NIFTY100 Enhanced

ESG TRI is the benchmark index for Invesco ESG equity fund (Invesco Mutual Fund, 2021).

#### **4.3.14. HSBC Global Equity Climate Change Fund of Fund**

HSBC Global Equity Climate Change Fund of Fund is a pure thematic fund to fight against climate change. MSCI AC World TRI is the benchmark index for the HSBC Global Equity Climate Change Fund of Fund (HSBC Mutual Fund, 2023).

### **4.4. Comparison of Performance of Socially Responsible Portfolios and Market Portfolios**

In this chapter, the comparison is made between the performance of socially responsible portfolios comprising various mutual fund schemes and socially responsible thematic indices. Also, compared these socially responsible portfolios with market portfolios (SENSEX and NIFTY 50 are used as proxies for market portfolios) based on various popular measures, including the traditional risk-adjusted return measures like Sharpe ratio and Treynor ratio and Jensen's Alpha measure. Since Alternative Investment Fund (AIF) is not widely considered an investment avenue among retail investors and the secondary data-based performance analysis is limited to mutual fund schemes and stock indices, the Avendus India ESG (a category III AIF) is eliminated, even though this fund is part of the sample for the study.

The brief profile of sample socially responsible mutual fund schemes and thematic indices are provided in Table 4.1 and Table 4.2, respectively. Also, the portfolios which do not have at least two years of trading history from inception to 31<sup>st</sup> March 2022 are excluded from the analysis. According to this criterion, the following seven portfolios are ignored: ICICI prudential ESG fund, Quant ESG equity fund, Mirae Asset ESG Sector Leaders ETF, Kotak ESG opportunities fund, Aditya Birla Sun Life ESG fund, Invesco ESG equity fund and HSBC Global Equity Climate Change Fund of Fund. This chapter is divided into the following sections;

- 4.4.1 Profile of Sample Socially Responsible Mutual Fund Schemes and Thematic Indices
- 4.4.2 Data and Methodology
- 4.4.3 Five-year Analysis of Socially Responsible Portfolios

#### 4.4.4 Two-year Analysis of Socially Responsible Portfolios

#### 4.4.5 Conclusion

#### 4.4.1. Profile of Sample Socially Responsible Mutual Fund Schemes and Thematic Indices

Table 4.1 and Table 4.2 detail the profile of socially responsible mutual fund schemes and thematic indices.

#### 4.4.1.a. Profile of Sample Socially Responsible Mutual Fund Schemes

**Table 4.1**

**Profile of Sample Socially Responsible Mutual Fund Schemes**

<b>Fund name</b>	<b>Benchmark</b>	<b>Inception</b>	<b>Fund House</b>	<b>AAUM (as on Dec 2022 in crores)</b>
SBI Magnum Equity ESG Fund	Nifty ESG 100	01-01-1991	SBI Mutual Fund	4676.00
Tata Ethical Fund	Nifty 500 Shariah	24-05-1996	Tata Mutual Fund	1497.28
Nippon India ETF Nifty 50 Shariah BeES	Nifty50 Shariah	18-03-2009	Nippon India Mutual Fund	15.34
Taurus Ethical Fund	S&P BSE 500 Shariah	20-03-2009	Taurus Mutual Fund	75.30
Quantum India ESG Equity Fund	NIFTY100 ESG	12-07-2019	Quantum Mutual Fund	61.98
Axis ESG Equity Fund	Nifty 100 ESG	12-02-2020	Axis Mutual Fund	1606.84
ICICI prudential ESG fund*	NIFTY 100 ESG	09-10-2020	ICICI Prudential Mutual Fund	1313.05
Quant ESG equity fund*	Nifty 100 ESG Index	05-11-2020	Quant Mutual Fund	158.65
Mirae Asset ESG Sector Leaders ETF*	NIFTY 100 ESG Sector Leaders Index	17-11-2020	Mirae Asset Mutual Fund	98.96
Kotak ESG opportunities fund*	Nifty 100 ESG Index	11-12-2020	Kotak Mutual Fund	1276.48
Aditya Birla Sun Life ESG fund*	Nifty 100 ESG	24-12-2020	Aditya Birla Sun Life Mutual Fund	930.52

Invesco ESG equity fund*	Nifty 100 ESG Index	20-03-2021	Invesco Mutual Fund	666.67
HSBC Global Equity Climate Change Fund of Fund*	MSCI AC World	22-03-2021	HSBC Mutual Fund	407.91
Aventus India ESG Fund***		02-01-2019	Aventus	

*Source: Compiled by the author from various secondary sources*

Note: \*\*\*not considered for analysis; AAUM denotes average asset under management as on December 2022. \*portfolios are not included for analysis since trading history is less than two years from inception to 31<sup>st</sup> March 2022.

#### 4.4.1.b. Profile of Sample Socially Responsible Thematic Indices

**Table 4.2**  
**Profile of Sample Socially Responsible and Broad Market Indices**

<b>Index name</b>	<b>Benchmark</b>
<b><i>Socially responsible indices</i></b>	
S&P BSE 100 ESG Index	Nifty 500
S&P BSE CARBONEX	Nifty 500
S&P BSE GREENEX	Nifty 500
NIFTY100 ESG Index	Nifty 500
NIFTY 100 Enhanced ESG Index	Nifty 500
MSCI ESG India Index	Nifty 500
<b><i>Broad market indices</i></b>	
NIFTY 50	Nifty 500
SENSEX	Nifty 500

*Source: Compiled by the author from various secondary sources*

Note: The broad market index NIFTY 500 is considered as market portfolio proxy for all indices under the study.

#### 4.4.2. Data and Methodology

The study evaluates socially responsible portfolios, including mutual fund schemes and various socially responsible thematic indices. Also, a comparison is

made between socially responsible portfolios with market portfolios where SENSEX and NIFTY 50 are used as proxies for general market portfolios. The study was conducted for five years, ranging from 1st April 2017 to 31st March 2022, and a sub-period of two-year analysis was conducted from 1st April 2020 to 31st March 2022. For calculation of returns, NAV or close price series are converted into log return series by taking the first differences of logarithm of the NAV or close price series. The following formula is used to convert the price series into a logarithmic return series.

$$R_{i,t} = \log \left( \frac{P_{i,t}}{P_{i,t-1}} \right)$$

Where,

$R_{i,t}$  is the logarithmic return at time t, while  $P_{i,t-1}$  and  $P_{i,t}$  are the daily NAV or closing prices of two consecutive days.

The computation of the risk-free rate of return is based on an average of 91-day Treasury Bills rate for the sample periods. The average risk-free rate of return for the entire sample period was 5.01 per cent and 3.38 per cent for the sub-period of two years. For the calculation of beta and return of the market portfolio, the benchmark for each mutual fund scheme provided in the mutual fund factsheet was considered. While for indices, the broad market index, NIFTY 500 was considered, as a common portfolio proxy for all indices under the study. The daily NAV series of mutual fund schemes were collected from the Association of Mutual Funds in India (AMFI) website, and close price series of various indices were collected from the official websites of the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE).

#### **4.4.2.1 Compounded Annual Returns**

Compounded Annual Growth Rate (CAGR) is a useful measure of growth over multiple time periods. CAGR is a geometric average of annual growth. Based on the highest CAGR growth, appropriate rankings are provided for the assets.

#### **4.4.2.2. Risk-adjusted Return Measures**

The risk-adjusted rates of return of portfolios were evaluated using the popular Sharpe Ratio and Treynor ratio.

#### 4.4.2.2.a. Sharpe Ratio

The Sharpe ratio of William Sharpe measures the return of the portfolio in excess of risk-free relative to the total risk of the portfolio. The higher the ratio, the better would be the performance of the portfolio in terms of the returns for the total risk taken. In the Sharpe ratio, risk or variability means the standard deviation ( $\sigma$ ) of portfolio return, which is considered as a measure of total risk.

$$\text{Sharpe ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where,

$R_f$  = risk-free rate of return

$R_p$  = compounded annual return of the portfolio

$\sigma_p$  = standard deviation of portfolio return

#### 4.4.2.2.b. Treynor Ratio

Jack Treynor developed the performance measure Treynor's ratio. In Treynor's ratio, reward to volatility or risk premium to volatility of return is measured by portfolio beta ( $\beta$ ). This means Treynor's ratio accounts only for systematic risk not total risk as in the case of Sharpe ratio. Beta is the measure of the systematic risk of a portfolio.

$$\text{Treyor ratio} = \frac{R_p - R_f}{\beta_p}$$

Where,

$R_f$  = risk-free rate of return

$R_p$  = compounded annual return of the portfolio

$\beta_p$  = beta

The calculations of these ratios are useful in comparing the performance of the portfolios under study.

#### 4.4.2.3. Jensen's Alpha

The Jensen's Alpha formula was used for the first time by Michael Jensen back in 1986. Jensen alpha measures the abnormal rate of return on a security in excess of what would be predicted by an equilibrium mode like the Capital Asset Pricing Model (CAPM) or Arbitrage Pricing Theory (APT). In other words, it measures if more than expected returns are being earned for the portfolio's riskiness. For a passively managed fund like ETF, the Jensen Alpha is expected to be 'zero'. If the alpha value is positive, it means the superior performance of the ETF than expected and if the value is negative, it indicates underperformance of the ETF relative to the theoretical expected return.

In order to get Jensen alpha, firstly used the traditional Capital Asset Pricing Model (CAPM) based single index model, where the intercept,  $\alpha$ , gives the Jensen alpha, which is interpreted as a measure of outperformance or underperformance relative to the used market proxy.

Formally,

$$\alpha_p = (R_p - R_f) + \beta(R_m - R_f) + \varepsilon$$

Where,

$\alpha_p$  = Jensen's alpha

$R_p$  = Return of the portfolio

$R_f$  = Risk-free return

$\beta$  = Beta of the portfolio

$R_m$  = Return of market portfolio/index

$\varepsilon$  = error term

#### 4.4.3. Five-year Analysis of Socially Responsible Portfolios

In this section, socially responsible portfolios are compared with general market portfolios. NIFTY 50 and SENSEX are the two market portfolios used in this study. Firstly, a comparison is made between the performance of various socially responsible portfolios and general market portfolios by using compounded annual returns for a five-year period ranging from 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2022. Finally,



a comparison is made on the performance of various socially responsible portfolios and general market portfolios using the Sharpe ratio, Treynor ratio and Jensen's Alpha measure. The concordance in the ranking of these three measures (Sharpe ratio, Treynor ratio and Jensen's Alpha) is also considered by employing Kendall's Coefficient of Concordance. For the analysis purpose, only those portfolios that have a five-year history of trading at the end of 31<sup>st</sup> March 2022 were considered, and the rest of the portfolios in the sample set were ignored.

#### 4.4.3.1. Compounded Annual Returns of Socially Responsible Portfolios and Market Portfolios for the Five-year Period

The comparison of the performance of socially responsible portfolios and general market portfolios was conducted solely based on their compounded annual returns of daily NAV or close price series. This method is not robust as it doesn't include risk elements. Table 4.3 presents the summary of compounded annual returns of socially responsible portfolios and general market portfolios, along with their standard deviation and beta values.

**Table 4.3**  
**Compounded Annual Returns of Socially Responsible Portfolios and Market Portfolios for the Five-year Period (from 1st April 2017 to 31st March 2022)**

Asset Name	SD	Beta	CAGR of return	Rank
<b><i>Socially responsible Fund</i></b>				
SBI Magnum Equity ESG Fund	0.186	0.979	12.72%	9
Tata Ethical Fund	0.155	0.084	13.86%	6
Nippon India ETF Nifty 50 Shariah BeES	0.176	0.988	14.35%	5
Taurus Ethical Fund	0.152	0.92	14.51%	3
<b><i>Socially responsible Indices</i></b>				
NIFTY 100 ESG	0.184	0.989	15.53%	1
NIFTY 100 Enhanced ESG	0.186	0.99	15.34%	2

S&P BSE GREENEX	0.187	0.969	12.10%	10
S&P BSE CARBONEX	0.188	1.017	13.16%	8
<b><i>Broad market indices</i></b>				
NIFTY 50	0.189	1.015	13.58%	7
SENSEX	0.189	1.015	14.38%	4

*Source: Compiled by the author from various secondary sources*

Table 4.3 reports the standard deviation, beta and compounded annual returns of socially responsible portfolios and general market portfolios for a five-year period from 1st April 2017 to 31st March 2022. The table reveals that all the portfolios listed in the table have compounded annual returns of above 12 per cent. This indicates that investors who invested in these portfolios would have earned returns of at least 12 per cent per year over the five-year period. Among the sample portfolios, the NIFTY 100 ESG index has a CAGR of 15.53 per cent and it ranks top in compounded annual return, followed by NIFTY 100 Enhanced ESG having a CAGR of 15.34 per cent and secured second rank. The third position is secured by the Taurus ethical fund, having a CAGR of 14.51 per cent S&P BSE GREENEX ranked at the bottom with a CAGR of 12.10 per cent. It is also evident from the table that the socially responsible portfolios generally have lower Betas and Standard Deviations compared to the broad market indices. This suggests that socially responsible portfolios may be less volatile and risky compared to the broader market.

#### **4.4.3.2. Comparison of Socially Responsible Portfolios and Market Portfolios Based on Risk-adjusted Return Ratios and Jensen's Alpha for the Five-year Period**

The performance of socially responsible portfolios and general market portfolios are compared using risk-adjusted return measures like the Sharpe ratio and Treynor ratio and Jensen's Alpha measure.

**Table 4.4****Comparison of Socially Responsible Portfolios and Market Portfolios Based on Risk-adjusted Return Ratios and Jensen's Alpha for the Five-year Period****(from 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2022)**

<b>Asset Name</b>	<b>Sharpe Ratio</b>	<b>Rank</b>	<b>Treynor Ratio</b>	<b>Rank</b>	<b>Jensen's Alpha</b>	<b>Rank</b>	<b>Sum of ranks</b>
<b><i>Socially responsible Fund</i></b>							
SBI Magnum Equity ESG Fund	0.414	9	0.079	9	-0.010	10	28
Tata Ethical Fund	0.570	4	1.051	1	0.071	1	6
Nippon India ETF Nifty 50 Shariah BeES	0.530	5	0.095	5	0.008	6	16
Taurus Ethical Fund	0.625	3	0.103	4	-0.008	9	16
<b><i>Socially responsible Indices</i></b>							
NIFTY 100 ESG	0.659	1	0.123	2	0.025	2	5
NIFTY 100 Enhanced ESG	0.642	2	0.121	3	0.024	3	8
S&P BSE GREENEX	0.379	10	0.073	10	-0.007	8	28
S&P BSE CARBONEX	0.430	7	0.080	7	-0.001	7	21
<b><i>Broad market indices</i></b>							
NIFTY 50	0.453	6	0.084	6	0.004	5	17
SENSEX	0.424	8	0.081	8	0.010	4	20

*Source: Compiled by the author from various secondary sources*

Table 4.4 provides a comparison of socially responsible portfolios, socially responsible indices, and broad market indices based on three performance measures: Sharpe ratio, Treynor ratio, and Jensen's Alpha. The table shows that NIFTY 100 ESG has the highest Sharpe ratio of 0.659 and the second-highest rank in terms of the Treynor ratio. Tata Ethical Fund has the highest Treynor ratio of 1.051 and the highest

Jensen's Alpha of 0.071. Based on the sum of ranks of three performance comparison measures (Sharpe ratio, Treynor ratio, and Jensen's Alpha measure), NIFTY 100 ESG has the lowest sum of ranks of 5, indicating that it was the best-performing portfolio based on the three measures in the study. The SBI Magnum Equity ESG Fund and S&P BSE GREENEX have the highest sum of ranks of 28, denoting that they were the lowest performers based on the composite of the three measures. Notably, five of the eleven socially responsible portfolios outperformed broad market indices in composite measures of Sharpe ratio, Treynor ratio, and Jensen's Alpha measure.

The evaluation of Jensen's performance index measure provided in the table reveals that four out of eight socially responsible portfolios, namely Tata Ethical Fund, Nippon India ETF Shariah BeES, NIFTY 100 ESG, and NIFTY 100 Enhanced ESG, have a positive measure, indicating that such portfolios have outperformed the expected rate of return. Similarly, both general market portfolios have outperformed since their alpha measure is positive.

#### 4.4.3.3 Concordance Performance Comparison Measure

This section furnishes the level of concordance or agreement among the three performance measures, Sharpe ratio and Treynor ratio and Jensen's Alpha, based on a five-year period ranking of various portfolios in the study.

**Table 4.5**

#### **Spearman's Rank Correlation among Performance Measures**

<b>Ratios</b>	<b>r</b>	<b>p-value</b>
Sharpe ratio -Treynor ratio	0.935	0.001
Sharpe ratio -Jensen's Alpha	0.765	0.001
Treynor ratio- Jensen's Alpha	0.880	0.001

*Source: Compiled by the author from various secondary sources*

Table 4.5 illustrates the Spearman rank correlation coefficients and p-values among the three performance measures - Sharpe ratio, Treynor ratio, and Jensen's Alpha. The results indicate that there is a high positive correlation between the rankings of Sharpe ratio and Treynor ratio ( $r=0.935$ ,  $p<0.001$ ), and there is also a

positive correlation between Sharpe ratio and Jensen’s Alpha ( $r=0.765$ ,  $p<0.001$ ) and between Treynor ratio and Jensen’s Alpha ( $r=0.880$ ,  $p<0.001$ ), although the correlations are slightly weaker than the correlation between Sharpe ratio and Treynor ratio. Thus, it shows that there is a highly significant positive correlation among the three performance comparison measures of Sharpe ratio and Treynor ratio and Jensen’s Alpha. Hence, there is somewhat significant agreement in the ranking determined by the three measurements.

#### 4.4.3.4. Comparison of Average Daily Return of Socially Responsible Portfolios and Market Portfolios

The comparison of the average daily returns of socially responsible portfolios and market portfolios were conducted based on the Friedman test. The entire sample period of five -years was taken for evaluation. The non-parametric alternative of repeated measures ANOVA was used for comparison since the daily return series is not normally distributed. Friedman is a non-parametric test used to compare three or more matched groups and here the portfolios are matched since they are measured over the same sample period and are somewhat well-diversified portfolios.

**Table 4.6**

#### **Friedman Test of Comparison of Average Daily Return of Socially Responsible Portfolios and Market Portfolios**

$\chi^2$	df	p
12.5	9	0.189

*Source: Compiled by the author from various secondary sources*

Table 4.6 reveals that there is no significant difference in average daily returns of various socially responsible portfolios and market portfolios with Chi-square (9) = 12.5,  $p = 0.189$ . Detailed post hoc analysis of the Durbin-Conover result is provided in Table 4.7. The Durbin-Conover test is one of the post-hoc tests used after a significant Friedman test. But here, the test statistic for the Friedman test is insignificant and only for reference purpose the summary post-hoc test result is provided in Table 4.7.

**Table 4.7**  
**Pairwise Comparisons (Durbin-Conover)**

<b>Asset Name</b>	<b>Asset Name</b>	<b>Statistic</b>	<b>p</b>
SBI Magnum Equity ESG Fund	Tata Ethical Fund	0.6780	0.498
SBI Magnum Equity ESG Fund	Nippon India ETF Nifty 50 Shariah BeES	0.1595	0.873
SBI Magnum Equity ESG Fund	Taurus Ethical Fund	0.0798	0.936
SBI Magnum Equity ESG Fund	NIFTY 100 ESG	0.3024	0.762
SBI Magnum Equity ESG Fund	NIFTY 100 Enhanced ESG	0.7278	0.467
SBI Magnum Equity ESG Fund	S&P BSE GREENEX	1.3227	0.186
SBI Magnum Equity ESG Fund	S&P BSE CARBONEX	1.3360	0.182
SBI Magnum Equity ESG Fund	NIFTY 50	1.3028	0.193
SBI Magnum Equity ESG Fund	SENSEX	0.9173	0.359
Tata Ethical Fund	Nippon India ETF Nifty 50 Shariah BeES	0.5185	0.604
Tata Ethical Fund	Taurus Ethical Fund	0.7577	0.449
Tata Ethical Fund	NIFTY 100 ESG	0.3755	0.707
Tata Ethical Fund	NIFTY 100 Enhanced ESG	0.0499	0.960
Tata Ethical Fund	S&P BSE GREENEX	2.0007	0.045
Tata Ethical Fund	S&P BSE CARBONEX	2.0140	0.044
Tata Ethical Fund	NIFTY 50	1.9808	0.048
Tata Ethical Fund	SENSEX	1.5953	0.111
Nippon India ETF Nifty 50 Shariah BeES	Taurus Ethical Fund	0.2393	0.811
Nippon India ETF Nifty 50 Shariah BeES	NIFTY 100 ESG	0.1429	0.886
Nippon India ETF Nifty 50 Shariah BeES	NIFTY 100 Enhanced ESG	0.5683	0.570
Nippon India ETF Nifty 50 Shariah BeES	S&P BSE GREENEX	1.4823	0.138
Nippon India ETF Nifty 50 Shariah BeES	S&P BSE CARBONEX	1.4956	0.135

Nippon India ETF Nifty 50 Shariah BeES	NIFTY 50	1.4623	0.144
Nippon India ETF Nifty 50 Shariah BeES	SENSEX	1.0768	0.282
Taurus Ethical Fund	NIFTY 100 ESG	0.3822	0.702
Taurus Ethical Fund	NIFTY 100 Enhanced ESG	0.8076	0.419
Taurus Ethical Fund	S&P BSE GREENEX	1.2430	0.214
Taurus Ethical Fund	S&P BSE CARBONEX	1.2563	0.209
Taurus Ethical Fund	NIFTY 50	1.2230	0.221
Taurus Ethical Fund	SENSEX	0.8375	0.402
NIFTY 100 ESG	NIFTY 100 Enhanced ESG	0.4254	0.671
NIFTY 100 ESG	S&P BSE GREENEX	1.6252	0.104
NIFTY 100 ESG	S&P BSE CARBONEX	1.6385	0.101
NIFTY 100 ESG	NIFTY 50	1.6052	0.108
NIFTY 100 ESG	SENSEX	1.2197	0.223
NIFTY 100 Enhanced ESG	S&P BSE GREENEX	2.0506	0.040
NIFTY 100 Enhanced ESG	S&P BSE CARBONEX	2.0639	0.039
NIFTY 100 Enhanced ESG	NIFTY 50	2.0306	0.042
NIFTY 100 Enhanced ESG	SENSEX	1.6451	0.100
S&P BSE GREENEX	S&P BSE CARBONEX	0.0133	0.989
S&P BSE GREENEX	NIFTY 50	0.0199	0.984
S&P BSE GREENEX	SENSEX	0.4055	0.685
S&P BSE CARBONEX	NIFTY 50	0.0332	0.973
S&P BSE CARBONEX	SENSEX	0.4188	0.675
NIFTY 50	SENSEX	0.3855	0.700

*Source: Compiled by the author from various secondary sources*

#### 4.4.4. Two-year Analysis of Socially Responsible Portfolios

In this section, a comparison is made between socially responsible portfolios and general market portfolios such as NIFTY 50 and SENSEX. Initially, the performance of various socially responsible portfolios and general market portfolios are compared using compounded annual returns for a two-year period ranging from 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2022. Finally, the performance of the socially responsible portfolios and general market portfolios are compared using the Sharpe ratio, Treynor ratio, and Jensen's Alpha measure. The concordance in the ranking of these three measures (Sharpe ratio, Treynor ratio and Jensen's Alpha) is also evaluated by employing Kendall's Coefficient of Concordance. For the analysis purpose, exclusively those portfolios that have a two-year history of trading at the end of 31<sup>st</sup> March 2022 were considered, and the rest of the portfolios in the sample set were ignored.

##### 4.4.4.1. Compounded Annual Returns of Socially Responsible Portfolios and Market Portfolios for a Two-year Period

The comparison made between socially responsible portfolios and general market portfolios was based only on the compounded annual returns of their daily NAV or close price series. This method is not robust as it does not include risk parameters. Table 4.8 reports the summary of compounded annual returns of socially responsible portfolios and general market portfolios, along with their standard deviation and beta value.

**Table 4.8**

##### **Compounded Annual Returns of Socially Responsible Portfolios and Market Portfolios for a Two-year Period (from 1st April 2020 to 31st March 2022)**

Asset Name	SD	Beta	CAGR of return	Rank
<i>Socially responsible Fund</i>				
SBI Magnum Equity ESG Fund	0.191	0.996	48.10%	4
Tata Ethical Fund	0.157	0.037	48.59%	3



Nippon India ETF Nifty 50 Shariah BeES	0.178	0.993	46.69%	8
Taurus Ethical Fund	0.207	0.927	41.08%	12
Quantum India ESG Equity Fund	0.167	0.852	46.47%	9
Axis ESG Equity Fund	0.155	0.749	33.83%	13
<b><i>Socially responsible Indices</i></b>				
NIFTY 100 ESG	0.185	0.988	47.82%	5
NIFTY 100 Enhanced ESG	0.185	0.991	47.71%	6
S&P BSE 100 ESG Index	0.193	-0.013	49.86%	2
S&P BSE GREENEX	0.193	0.987	52.62%	1
S&P BSE CARBONEX	0.192	1.029	46.79%	7
<b><i>Broad market indices</i></b>				
NIFTY 50	0.193	1.033	45.46%	10
SENSEX	0.196	1.041	43.95%	11

*Source: Compiled by the author from various secondary sources*

Table 4.8 reports compounded annual returns of socially responsible portfolios and general market portfolios for a two-year period. The table reveals that all portfolios have compounded annual returns of above 40 per cent except for Axis ESG Equity Fund, with compounded annual growth in NAV of 33.83 per cent. Among sample portfolios, S&P BSE GREENEX ranks at the top in compounded annual return and Axis ESG Equity Fund ranks at the bottom. It is also significant that nine of eleven socially responsible portfolios outperformed broad market indices in compounded annual return.

The table provides that based on the total risk measure standard deviation (SD), SENSEX has the highest risk (0.196), and Axis ESG Equity fund has the lowest total risk (0.155). The evaluation of beta values proves that most portfolios have a beta value above 0.90, suggesting such portfolios have sensitivity that is par with their concerned benchmark index. Meanwhile, S&P BSE CARBONEX, NIFTY 50 and SENSEX are more sensitive or more volatile than the market proxy NIFTY 500 since their beta value is above 1. S&P BSE 100 ESG Index is negatively correlated with the market proxy NIFTY 500 since its beta value is negative. This fact proves that almost

all socially responsible portfolios are less sensitive than their market portfolio except S&P BSE CARBONEX.

#### 4.4.4.2. Comparison of Socially Responsible Portfolios and Market Portfolios Based on Risk-Adjusted Return Ratios and Jensen's Alpha for a Two-year Period

An analysis is conducted to examine and compare the performance of socially responsible portfolios and general market portfolios based on risk-adjusted return measures like the Sharpe ratio and Treynor ratio and Jensen's Alpha measure. The result is exhibited below:

**Table 4.9**

#### **Comparison of Socially Responsible Portfolios and Market Portfolios Based on Risk-Adjusted Return Ratios and Jensen's Alpha for a Two-year Period**

(from 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2022)

Asset Name	Sharpe Ratio	Rank	Treynor Ratio	Rank	Jensen's Alpha	Rank	Sum of Ranks
<b><i>Socially responsible Fund</i></b>							
SBI Magnum Equity ESG Fund	2.36	8	0.45	5	-0.012	8	21
Tata Ethical Fund	2.89	1	12.1	2	0.388	2	5
Nippon India ETF Nifty 50 Shariah BeES	2.44	4	0.44	8	0.009	5	17
Taurus Ethical Fund	1.82	13	0.41	10	-0.048	12	35
Quantum India ESG Equity Fund	2.58	2	0.51	3	0.038	4	9
Axis ESG Equity Fund	1.97	12	0.41	12	-0.041	10	34
<b><i>Socially responsible Indices</i></b>							
NIFTY 100 ESG	2.41	5	0.45	5	-0.001	6	16
NIFTY 100	2.39	7	0.45	7	-0.003	7	21

Enhanced ESG							
S&P BSE 100 ESG Index	2.40	6	-36.10	1	0.468	1	8
S&P BSE GREENEX	2.55	3	0.5	4	0.048	3	10
S&P BSE CARBONEX	2.28	9	0.42	9	-0.029	9	27
<b><i>Broad market indices</i></b>							
NIFTY 50	2.19	10	0.41	10	-0.044	11	31
SENSEX	2.07	11	0.39	13	-0.063	13	37

*Source: Compiled by the author from various secondary sources*

Table 4.9 presents a comparison of socially responsible portfolios and market portfolios based on risk-adjusted return ratios and Jensen's Alpha over a two-year period from 1st April 2020 to 31st March 2022. The table shows the Sharpe ratio, Treynor ratio, and Jensen's Alpha measure for each asset, along with their respective ranks and a sum of ranks. Tata ethical fund has the highest Sharpe ratio of 2.89 and S&P BSE 100 ESG has the highest Treynor ratio of -36.10 and the highest Jensen's Alpha of 0.468. It is evident from Table 4.9 that, based on the sum of ranks of three performance comparison measures, Tata Ethical fund has the lowest sum of the rank of 5, signifying the top performer based on the three measures under the study and SENSEX has the highest sum of the rank of 37, denoting lowest performer based on a composite of the three measures. Notably, ten of eleven socially responsible portfolios outperformed broad market indices in composite measures Sharpe ratio and Treynor ratio and Jensen's Alpha measure.

#### **4.4.4.3. Concordance Performance Comparison Measure**

The section provides the level of concordance or agreement among the three performance measures Sharpe ratio and Treynor ratio and Jensen's Alpha based on a two-year period ranking of various portfolios in this study.

**Table 4.10**

**Spearman's Rank Correlation among Performance Measures**

<b>Ratios</b>	<b>r</b>	<b>p-value</b>
Sharpe ratio -Treynor ratio	0.832	0.001
Sharpe ratio -Jensen's Alpha	0.885	0.001
Treynor ratio- Jensen's Alpha	0.934	0.001

*Source: Compiled by the author from various secondary sources*

Table 4.10 displays the Spearman rank correlation coefficients and p-values for the Sharpe ratio, Treynor ratio, and Jensen's Alpha measures. The findings indicate a strong positive correlation between the rankings of the Sharpe ratio and Treynor ratio ( $r=0.832$ ,  $p<0.001$ ). The correlations between the Sharpe ratio and Jensen's Alpha ( $r=0.885$ ,  $p<0.001$ ) and between the Treynor ratio and Jensen's Alpha ( $r=0.934$ ,  $p<0.001$ ) are also positive. It shows that there is a highly significant positive correlation among the three performance comparison measures of Sharpe ratio and Treynor ratio and Jensen's Alpha. Hence, this suggests that there is somewhat significant agreement in the ranking determined by the three measurements.

**4.4.5. Conclusion**

The chapter compared the performance of social responsibility-themed mutual funds and indices. There are several sustainability-themed mutual funds and indices offered in India. SBI Mutual Fund introduced the SBI Magnum Equity ESG Fund, the first ESG mutual fund, in 1991. It is important to note that the majority of the funds were incepted from 2019 onwards. This shows the growing significance of ESG investing in India. Compound Annual Returns and Risk-Adjusted Measures confirmed that sustainability-themed funds gave investors a respectable return for the study period of 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2022. That is, all the sustainability-themed funds yielded more than 12 per cent compounded annual returns and when compared to broad market indices, these funds are less risky and volatile, with lower beta and standard deviation values. It is found from the two-year analysis that all the portfolios

yielded more than 40 per cent compounded annual returns except Axis ESG Equity Fund.

Furthermore, it is evident from the analysis that sustainability-themed portfolios also exhibited positive performance in the case of risk-adjusted measures. This indicates that social responsibility-themed portfolios outperformed other general market proxies, and the risk is also comparatively lower for social responsibility-themed portfolios. The results are consistent with those of Jasuja et al. (2021), Akhileshwari et al. (2021), Jain and Mehrotra (2021); Sood et al. (2022). The result suggests that investors can earn a better return by investing in sustainability-themed funds and companies.

## References

- Aditya Birla Capital Mutual Fund. (2021, October 29). *Aditya Birla Sun Life ESG Fund: Key Information Memorandum*.  
<https://mutualfund.adityabirlacapital.com/-/media/bsl/files/resources/forms/applicationforms/kim-absl-esg-fund-291021.pdf>
- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2021). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemiae Meridionalis*, 24(3), 95–106.  
<https://doi.org/10.32725/acta.2021.014>
- Asia Index Private Limited. (2014). *S&P Dow Jones Indices: S&P BSE CARBONEX Methodology*.
- Asia Index Private Limited. (2022) *S&P BSE Sustainability Indices Methodology*.
- Asia Index Private Limited. (2022). *S&P BSE 100 ESG Index Methodology*.
- Avendus. (2019, February 7). *Avendus India ESG Fund*.  
<https://www.avendus.com/india/newsroom/avendus-has-successfully-launched-india-s-first-esg-fund>
- Axis Mutual Fund. (2023, October 31). *Scheme Information Document: Axis ESG Equity Fund*.  
<https://www.axismf.com/cms/sites/default/files/Statutory/Axis%20ESG%20Equity%20Fund%20-%20SID.pdf>
- Edelweiss, Bank of America, Morgan Stanley. (2020). *ICICI Prudential ESG Fund*.  
[https://www.icicipruamc.com/docs/default-source/default-document-library/icici-prudential-esg-fund-\\_investor-version-\(2\).pdf](https://www.icicipruamc.com/docs/default-source/default-document-library/icici-prudential-esg-fund-_investor-version-(2).pdf)
- HSBC Mutual Fund. (2023, April 28). *Scheme Information Document: HSBC Global Equity Climate Change Fund of Fund*. [hsbc-global-equity-climate-change-fund-of-fund-nfo-sid.pdf](https://www.hsbcglobalfund.com/india/india-fund-fund/hsbc-global-equity-climate-change-fund-of-fund-nfo-sid.pdf)
- India Index Services & Products Limited. (2018, March). *NIFTY 100 Enhanced ESG Index*.  
[https://www.niftyindices.com/docs/default-source/indices/nifty100-enhanced-esg/nifty\\_esg\\_indices\\_whitepaper.pdf?sfvrsn=eba79834\\_4](https://www.niftyindices.com/docs/default-source/indices/nifty100-enhanced-esg/nifty_esg_indices_whitepaper.pdf?sfvrsn=eba79834_4)
- Invesco Mutual Fund. (2021). *Invesco ESG Equity Fund*.  
<https://www.invescomutualfund.com/docs/default-source/default-document-library/esg-equity-fund>
- Jain, N., & Mehrotra, V. (2021). A Comparative Study of Performance of ESG Indices with Parent Index in Indian Stock Market. *Pacific Business Review (International)*, 14(2), 101-109. <https://www.researchgate.net/publication/357127666>
- Kotak Mutual Fund. (2020). *Kotak ESG Opportunities Fund*.  
[https://dms.kotakmf.com/DMS/public/upload/1605764333967\\_Kotak\\_ESG\\_Opportunities\\_Fund-18-11-2020.pdf](https://dms.kotakmf.com/DMS/public/upload/1605764333967_Kotak_ESG_Opportunities_Fund-18-11-2020.pdf)
- Mirae Asset Mutual Fund. (2021). *Mirae Asset ESG Sector Leaders ETF*.  
[https://www.miraeassetmf.co.in/docs/default-source/product-presentations/mirae-asset-esg-sector-leader-etf-fof-\(1\).pdf?sfvrsn=4a139cd5\\_2](https://www.miraeassetmf.co.in/docs/default-source/product-presentations/mirae-asset-esg-sector-leader-etf-fof-(1).pdf?sfvrsn=4a139cd5_2)
- Morgan Stanley (2022). *2022 ESG Report: Diversity & Inclusion, Climate, and Sustainability*.

- MSCI. (2023, November 30). *MSCI India ESG Leaders Index (USD)*. Index Factsheet. <https://www.msci.com/documents/10199/06d20a9e-bd6b-4ea8-a7a2-31cfb0444273>
- National Stock Exchange. (2023, November 30). *NSE Indexogram NIFTY100 ESG Index*. [https://niftyindices.com/Factsheet/Factsheet\\_NIFTY100\\_ESG\\_Index.pdf](https://niftyindices.com/Factsheet/Factsheet_NIFTY100_ESG_Index.pdf)
- Nippon India Mutual Fund. (2021). *Nippon India Shariah BeEs*. <https://mf.nipponindiaim.com/FundsAndPerformance/ProductNotes/NipponIndia-ETF-Shariah-BeES.pdf>
- Quant Mutual Fund. (2023, April 14). *Quant ESG Equity Fund*. [https://quantmutual.com/Admin/SIDPdf/quant%20ESG%20Equity%20Fund\\_SID%202023.pdf](https://quantmutual.com/Admin/SIDPdf/quant%20ESG%20Equity%20Fund_SID%202023.pdf)
- Quantum Mutual Fund. (2023, October 31). *Scheme Information Document: Quantum India ESG Equity Fund*. <https://www.quantumamc.com/FileCDN/ImportantDocuments/Scheme-Information-Documents/SID-Quantum-India-ESG-Equity-Fund.pdf>
- SBI Mutual Fund. (2023, January 31). *SBI Magnum Equity ESG Fund*. [https://www.sbimf.com/docs/default-source/scheme-factsheets/sbi-magnum-equity-esg-fund-factsheet-9e32b0e9-b650-4e88-950c-8625113ccd7f.pdf?sfvrsn=fa2d5b9b\\_2](https://www.sbimf.com/docs/default-source/scheme-factsheets/sbi-magnum-equity-esg-fund-factsheet-9e32b0e9-b650-4e88-950c-8625113ccd7f.pdf?sfvrsn=fa2d5b9b_2)
- Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2022). Did ESG portfolio augment investors' wealth during Covid-19? Evidence from Indian stock market. *Sustainability Accounting Management and Policy Journal*, 14(2). <https://doi.org/10.1108/SAMPJ-02-2022-0087>
- Tata Mutual Fund. (2023). *Tata Ethical Fund*. [https://www.tatamutualfund.com/docs/default-source/scheme-brochures/2023/may/tata-ethical-fund\\_1pager.pdf?sfvrsn=575d19e7\\_4](https://www.tatamutualfund.com/docs/default-source/scheme-brochures/2023/may/tata-ethical-fund_1pager.pdf?sfvrsn=575d19e7_4)
- Taurus Mutual Fund. (2023, April 30). *Taurus Ethical Fund: Key Information Memorandum*. [https://www.taurusmutualfund.com/sites/default/files/2023-09/KIM\\_Taurus\\_Ethical\\_Fund\\_0.pdf](https://www.taurusmutualfund.com/sites/default/files/2023-09/KIM_Taurus_Ethical_Fund_0.pdf)

## Websites

- <https://mutualfund.adityabirlacapital.com>
- <https://www.assetmanagement.hsbc.co.in>
- <https://www.avendus.com>
- <https://www.axismutualfund.com>
- <https://www.invescomutualfund.com>
- <https://www.kotakmf.com>
- <https://www.mf.nipponindiaim.com>
- <https://www.miraeassetmf.co.in>
- <https://www.msci.com>
- <https://www.mutualfund.adityabirlacapital.com>
- <https://www.niftyindices.com>
- <https://www.quantmutual.com>
- <https://www.QuantumAMC.com>
- <https://www.sbimf.com>
- <https://www.tatamutualfund.com>
- <https://www.taurusmutualfund.com>

**CHAPTER 5**  
**DATA ANALYSIS**



## **CHAPTER 5**

### **DATA ANALYSIS**

#### **5.1. Introduction**

The present study analyses the awareness and perception towards socially responsible investment by the Kerala stock market investors and evaluates their inclination to invest in socially responsible financial products. For this, data was collected from 564 investors with active demat accounts who belonged to any of the selected districts (namely, Thiruvananthapuram, Ernakulam, and Kozhikode). The awareness, perception and behaviour of the investors may vary from person to person. This chapter presents a detailed analysis of the data collected from stock market investors in Kerala with respect to their awareness and perception towards socially responsible investment (SRI) and their inclination to invest in SRI. The analysis has been made as per the objectives of the study. The chapter begins with the demographic characteristics of the respondents, followed by information related to their participation in the stock market by the respondents and information regarding their investment decisions. The next part of this chapter deals with how familiar investors are with the different dimensions of SRI and their perception of SRI. The chapter then analyses the factors influencing investors to invest in socially responsible investments.

#### **5.2. Demographic Profile of the Respondents**

The study aims to understand the awareness, perception and behavioural intention of stock market investors towards the concept of socially responsible investment, and a significant part of the analysis will focus on demographic characteristics. Demographic variables may influence the investment behaviour of individuals. These characteristics include the district of residence, residential location, gender, age, educational qualification, occupation, marital status and average annual income. They are deemed important as they may influence how these investors perceive and act towards socially responsible investment. By considering demographic factors, the study aims to give a more thorough comprehension of the stock market investors' perception towards socially responsible investment.

### 5.2.1. District-wise Classification of the Respondents

To ensure unbiased sampling, Kerala is divided into three regions and a district from each region is chosen randomly through a lottery method. An equal number of responses are then gathered from each selected district.

**Table 5.1**  
**District-wise Classification of the Respondents**

<b>District</b>	<b>Frequency</b>	<b>Percentage</b>
Thiruvananthapuram	188	33.3
Ernakulum	188	33.3
Kozhikode	188	33.4
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.1 depicts the distribution of respondents by district of residence. Three districts are represented in Table 5.1, namely, Thiruvananthapuram, Ernakulum, and Kozhikode. The number of respondents from each district is shown in the frequency column, while the percentage column shows the proportion of respondents from each district as a fraction of the overall number of respondents (564). According to the data, Thiruvananthapuram, Ernakulum, and Kozhikode all have the same number of respondents (188) and the same fraction of total respondents (33.3 per cent). This suggests that the three districts are represented evenly in the sample.

### 5.2.2. Residential Location of the Respondents

The place of residence or residential location of the respondents was classified into three categories, namely corporation, municipality, and grama panchayat. The residential location-wise classification of the respondents is presented in Table 5.2.

**Table 5.2**  
**Residential Location of the Respondents**

Residential location	Frequency	Percentage
Corporation	101	17.9
Municipality	153	27.1
Grama panchayat	310	55.0
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.2 provides information on the residential location of the investors. It shows that more than half of the respondents (55 per cent) reside in grama panchayat, 27 per cent reside in the municipality, and only 17.9 per cent belong to corporations. From the above table, it can be inferred that most sample respondents reside in rural areas of Kerala.

### 5.2.3. Gender-wise Classification of the Respondents

It is evident from previous studies that female participation in the stock market is much less compared to males in Kerala (Manuel, 2014; George, 2017; Nishad, 2018; Jyothi, 2020; Benny, 2021). Table 5.3 below represents the gender-wise classification of the respondents. The selection of male and female respondents in the sample was not done deliberately; instead, it was collected randomly.

**Table 5.3**  
**Gender-wise Classification of the Respondents**

Gender	Frequency	Percentage
Male	434	77.0
Female	117	20.7
Others	13	2.3
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

According to the above data, 77 per cent are male, with the remaining 23 per cent being female and others. This gender-based classification of respondents indicates that the majority of respondents are male, which is consistent with the

findings of stock market investment-based studies conducted in India, such as those conducted by Manuel (2014), George (2017), Nishad (2018), Jyothi (2020), and Benny (2021).

#### 5.2.4. Age-wise Classification of the Respondents

The respondents have been grouped into three categories: below 30 years, 30-60 years, and above 60 years. Table 5.4 below represents the age-wise classification of the respondents.

**Table 5.4**  
**Age-wise Classification of the Respondents**

Age (in years)	Frequency	Percentage
Below 30 years	243	43.1
30-60 years	315	55.9
Above 60 years	6	1
<b>Total</b>	<b>564</b>	<b>100</b>

*Source: Primary data*

Table 5.4 exhibits age wise distribution of the investors. It illustrates that 43.1 per cent of respondents belong to the below 30 years age group, 55.9 per cent belong to the 30-60 years age group, and only 1 per cent belong to the above 60 years age group. It is pertinent to note that the respondents above the age of 60 are negligible (1 per cent). This indicates the relatively low participation of older people in stock market investment. The data also suggests that 99 per cent of the respondents are either younger than 30 or between the ages of 30 and 60.

#### 5.2.5. Education-wise Classification of the Respondents

As per the National Survey of India, Kerala is the most literate state in India, with the highest female literacy rate and second-highest male literacy rate after Lakshadweep (The Global Statistics, 2023). Education plays a crucial role in shaping investment decisions (Manuel, 2014; George, 2017; Jyothi, 2020). Respondents were divided into six categories based on their education level and presented in Table 5.5

**Table 5.5**  
**Education-wise Classification of the Respondents**

<b>Educational qualification</b>	<b>Frequency</b>	<b>Percentage</b>
Below SSLC	8	1.4
SSLC	35	6.2
Plus Two	114	20.2
Graduation	214	37.9
Post-Graduation	166	29.4
Others	27	4.8
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.5 presents the classification of the investors based on their education. Of the 564 investors, 37.9 per cent of the respondents have graduation as their highest qualification, followed by those with post-graduation qualification (29.4 per cent). Only 1.4 per cent had schooling below the SSLC level, compared to 20.2 per cent who had finished Plus Two and 6.2 per cent who had an SSLC degree. The remaining 4.8 per cent of respondents were investors with diplomas, PhDs, Chartered Accountants and completed specialised courses.

### **5.2.6. Occupation-wise Classification of the Respondents**

Occupation is a significant source of income for individuals and can greatly influence their investment decisions (Manuel, 2014; George, 2017; Jyothi, 2020). The Table 5.6 provides an understanding of the different occupational backgrounds of the respondents. The respondents are classified into six categories: business, profession, government employee, private employee, retired and others.

**Table 5.6**  
**Occupation-wise Classification of the Respondents**

<b>Occupation</b>	<b>Frequency</b>	<b>Percentage</b>
Business	76	13.5
Profession	129	22.9
Government Employee	105	18.6

Private Employee	210	37.2
Retired	8	1.4
others	36	6.4
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Of the total, 210 (37.2 per cent) are employed in the private sector and 129 (22.9 per cent) are professionals. 105 (18.6 per cent) respondents work in the government sector, which is a sizable percentage and 13.5 per cent are involved in the business. Only a small percentage of respondents (1.4 per cent) are retired. The remaining 6.4 per cent of respondents include students, researchers, homemakers and self-employed people.

### 5.2.7. Marital Status-wise Classification of the Respondents

Marital status influences the spending habits and savings habits of individuals. Marital status is an important factor that influences the investment decisions of individuals (Rana & Vibha, 2017). Marital status may influence the spending and saving habits of individuals to a great extent. Thus, the respondents are grouped into four categories as presented in Table 5.7.

**Table 5.7**

#### **Marital Status-wise Classification of the Respondents**

<b>Marital status</b>	<b>Frequency</b>	<b>Percentage</b>
Single	194	34.4
Married	353	62.6
Widowed	10	1.8
Separated	7	1.2
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It is clear from Table 5.7 that the majority of respondents, 62.6 per cent (353 respondents), are married. 34.4 per cent (194 respondents) are single, 1.8 per cent (10 respondents) are widowed and 1.2 per cent (7 respondents) are separated.

### 5.2.8. Annual Income-wise Classification of the Respondents

The average annual income from all sources is an important variable in determining the economic status and investment habits of an individual (Manuel, 2014; Jyothi, 2020). The respondents are categorized into five categories based on annual income.

**Table 5.8**  
**Annual Income-wise Classification of the Respondents**

Average annual income (in rupees)	Frequency	Percentage
Below Rs.250000	188	33.3
Rs.250001- Rs.500000	155	27.5
Rs.500001- Rs.750000	68	12.1
Rs.750001- Rs.1000000	66	11.7
Above Rs.1000000	87	15.4
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.8 portrays the average annual income-wise distribution of 564 investors. A significant proportion of the respondents (33.3 per cent) have incomes under Rs. 250000 whereas 27.5 per cent fall into Rs.250001- Rs.500000 range. There is only a small difference in the percentage of responses between the categories of Rs.500001– Rs.750000 and Rs.750001– Rs.1000000, with proportions of 12.1 per cent and 11.7 per cent, respectively. Finally, 15.4 per cent (87 respondents) have an average annual income above Rs.1000000.

### 5.3. Information Related to Stock Market Participation

To gain an in-depth understanding of investors' attitudes, perceptions, and behaviours towards socially responsible investment, gathering information about their engagement in the stock market is important. The level of involvement in the stock market is an important signal of their trust and confidence in the stock market (Manuel, 2014; Jyothi, 2020).

This information related to investors' participation in the stock market should include:

- Investors' experience with the stock market.
- The investment alternatives preferred by the investors.
- The trading methods preferred by the respondents.
- The average length of time they hold their investments.
- Their level of knowledge about investments.
- The frequency with which they trade.
- The main reasons for their investing decisions.
- Their preferred investment type depends on their risk tolerance and expected return.
- How they will react if the stock trading outcomes are negative, such as whether they will sell their stocks or keep them.

Examining this data can provide a comprehensive knowledge of the factors influencing investors' preference and their attitudes to socially responsible investing.

### 5.3.1. Experience in Stock Market Operation

The stock market experience of investors has a considerable impact on their investment selections. It affects their perception, cognition, and investment attitude (Manuel, 2014; Jyothi, 2020). Based on their stock market experience, respondents are classified into five major groups. The classification of respondents into these groups is presented in Table 5.9.

**Table 5.9**  
**Experience in Stock Market Operation**

<b>Experience (in years)</b>	<b>Frequency</b>	<b>Percentage</b>
Below one year	132	23.4
1- 3 years	159	28.2
3-5 years	155	27.5
5-10 years	96	17.0
Above 10 years	22	3.9
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*



It is seen from Table 5.9 that a significant proportion of investors (159 respondents) have only limited stock market experience of 1-3 years, and 23.4 percent have less than one year of experience. This could imply that a substantial proportion of investors are new to the stock market and are still learning about it and its operations. However, just 3.9 per cent of investors have more than ten years of trading expertise. These investors could have a better understanding of how the stock market works. Furthermore, 17.5 per cent of investors have 5-10 years of experience, while 27.5 per cent have 3-5 years of experience.

### 5.3.2. Investment Avenues Preferred

Previous studies suggest that the typical investment choices preferred by Keralites are bank deposits, insurance schemes, chit funds and gold (Sajoy, 2015; Ninan, 2019). This study focuses on the attitude and behaviour of stock market investors in Kerala, and thus, their preferences for direct equity investments, mutual funds, and Systematic Investment Plans (SIPs) were considered.

#### 5.3.2.1. Preference for Direct Equity

Direct equity investment involves purchasing shares of a company and earning profits through dividends and capital appreciation. This type of investment directly exposes the investor to the stock market and the performance of the company they are invested in. Table 5.10 presents the breakdown of respondents according to their inclination towards direct equity investment.

**Table 5.10**  
**Preference for Direct Equity**

Preference	Frequency	Percentage
Preferred	503	89.2
Not preferred	61	10.8
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It can be noticed from Table 5.10 that the majority of the respondents (89.2 per cent), stated a preference for direct equity investment. On the other hand, only a

minority, 10.8 per cent of respondents expressed their non-preference for direct equity investment.

### 5.3.2.2. Preference for Mutual Fund

A mutual fund is a financial instrument that pools the savings of the investors and invests in securities of listed companies. A mutual fund provides the opportunity for small investors to access professionally managed funds. Table 5.11 displays the data on investors' preferences for mutual funds.

**Table 5.11**  
**Preference for Mutual Fund**

Preference	Frequency	Percentage
Preferred	266	47.2
Not preferred	298	52.8
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Of the total, a significant proportion of investors, 266, preferred mutual fund investment, whereas more than half of the investors (52.8 per cent) do not prefer to invest in mutual funds.

### 5.3.2.3. Preference for SIP (Systematic Investment Plan)

The Systematic Investment Plan (SIP) is an increasingly popular investment option that enables individuals to invest a small amount of money regularly, instead of making a large lump sum investment. Table 5.12 exhibits the preference of respondents for SIP.

**Table 5.12**  
**Preference for SIP (Systematic Investment Plan)**

Preference	Frequency	Percentage
Preferred	286	50.7
Not preferred	278	49.3
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.12 reveals that 50.7 per cent (286 respondents) preferred SIP investment, whereas 49.3 per cent (278 respondents) did not.

#### 5.3.2.4. Preference for Other Investment Alternatives

Table 5.13 presents the data on the preference of respondents for other forms of financial instruments in the stock market, besides equity, mutual funds, and SIP. Participants were given the option to choose others in the questionnaire, and their preference is shown in Table 5.13.

**Table 5.13**  
**Preference for Other Investment Alternatives**

Preference	Frequency	Percentage
Preferred	12	2.1
Not preferred	552	97.9
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

The percentage analysis shows that only a small proportion (2.1 per cent) of investors expressed their preference for alternative investment options. These options include ETFs (Exchange Traded Funds), bonds, futures and options, gold ETFs, gold bonds, commodity derivatives, and sovereign gold bonds (SGB). The remaining 97.9 per cent of investors did not show a preference for alternative investment options.

The data shows the preferences of investors in various investment avenues, including direct equity, mutual funds, Systematic Investment Plans (SIPs), and others. This analysis of data on the preference of investors towards various investment alternatives indicated that direct equity is the most desired investment option among investors, with 89.2 per cent showing a preference for it. Systematic Investment Plans (SIPs) were the second most popular option, with 50.7 per cent of investors preferring them. Mutual funds were the third most popular option, with 47.2 per cent of investors choosing them. In summary, direct equity is substantially more popular than mutual funds, SIPs, and other investment alternatives, while SIPs are favoured over mutual funds and other investment options.

### 5.3.3. Mode of Trading Preferred

There are different modus for buying and selling shares. The investors are grouped into four categories based on the mode of trading preferred, namely, online trading, broker services, sub-broker and franchisee of large broker. Online trading is now one of the most popular methods of trading in which the investor can buy and sell securities with the help of computers and the internet; even by using a mobile phone, the trading can be done online. Stockbroking is an old form of trading in which investors approach stock brokers to buy and sell securities. The investors can trade with the help of sub-brokers, who act as intermediaries between the main brokers and the investors. The investors can also trade with the help of franchisees of large brokers. The preference of investors with regard to different trading methods is presented in Table 5.14.

**Table 5.14**  
**Mode of Trading Preferred**

<b>Mode</b>	<b>Frequency</b>	<b>Percentage</b>
Online trading	461	81.7
Broker services	86	15.2
Sub-broker	11	2.0
Franchisee of a large broker	6	1.1
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

The survey results revealed that the majority of respondents, 81.7 per cent, prefer online trading over other modes of trading. This suggests that many investors prefer online platforms for trading due to their convenience and accessibility. On the other hand, only 15.2 per cent of the respondents prefer broker services for trading. Stock brokers offer professionally managed financial services, but their use is less common among investors than internet trading. A very small proportion of respondents, 2 per cent and 1.1 per cent, respectively, preferred sub-brokers and franchisees of large brokers over other modes of trading.

### 5.3.4. Average Holding Period of Investment

It is assumed that investors tend to keep their investments for extended periods, believing that this will lead to higher returns over the long term (Nishad, 2018). Table 5.15 classifies investors into four groups based on the average holding period of their investments.

**Table 5.15**  
**Average Holding Period of Investment**

<b>Holding period (in years)</b>	<b>Frequency</b>	<b>Percentage</b>
Below 1 year	269	47.7
1-3 years	191	33.9
3-5 years	42	7.4
Above 5 years	62	11
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.15 illustrates that nearly half of the investors, 47.7 per cent of investors retain their assets for less than a year. That is, a significant portion of investors sell their investments within one year. One-third, 33.9 per cent of investors hold their assets for one to three years. More than seven per cent have a holding time of 3 to 5 years. The remaining 11 per cent have an average holding period of more than 5 years.

### 5.3.5. Knowledge of Investments

Table 5.16 displays the categorization of investors based on their self-assessed knowledge of investments. The investors are asked to rate their level of knowledge and the results are divided into five categories, ranging from poor to excellent.

**Table 5.16**  
**Knowledge of Investments**

<b>Knowledge</b>	<b>Frequency</b>	<b>Percentage</b>
Poor	4	0.7
Fair	94	16.7

Good	380	67.3
Very good	80	14.2
Excellent	6	1.1
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.16 depicts the categorization of investors based on their level of knowledge of their investments. It reveals that the majority of investors (380 respondents) have a decent degree of investment knowledge, 16.7 per cent of investors have a fair knowledge of investments and 14.2 per cent of investors have a very good understanding of investments. It is also evident that the level of knowledge is found to be very limited for a small proportion of investors (0.7 per cent) and only 1.1 per cent of the investors have an excellent understanding of their investment.

### 5.3.6. Frequency of Trading

There are different kinds of investors; some may actively buy and sell shares, and some may buy shares and hold them for several years. The investors are divided into five groups based on how often they buy and sell shares. These groups include daily, weekly, monthly, yearly and occasional.

**Table 5.17**  
**Frequency of Trading**

<b>Frequency of trading</b>	<b>Frequency</b>	<b>Percentage</b>
Daily	127	22.5
Weekly	164	29.1
Monthly	154	27.3
Yearly	7	1.2
Occasionally	112	19.9
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.17 displays the frequency of trading among investors. It shows that among 564 investors surveyed, the highest number of investors (164) traded weekly, followed by 154 trading monthly and 127 engaging in daily trading activities. Around

20 per cent of the investors are occasional traders and only a minute percentage (1.2 per cent) trade yearly.

### 5.3.7. Motives for Investing in the Stock Market

The main motive behind investing in the stock market is to increase the personal wealth of the individuals. Investors can earn returns mainly through capital appreciation, dividends, and several other reasons for investing in the stock market. Table 5.18 displays the motives behind investing in the stock market. The respondents were asked to rank their reasons for investing in the stock market. The table lists seven variables used to study the influence of different motives. The variables include return, safety, liquidity, capital appreciation, tax benefit, diversification benefit and taking part in CSR activities of the invested company. The mean rank was calculated to determine the influence of each motive, and based on the mean rank, the motives were ranked from the most influential to the least influential.

**Table 5.18**  
**Motives for Investing in the Stock Market**

Motives	N	Mean Rank	Rank based on Influence
Return	564	1.1099	1
Safety	564	4.8191	5
Liquidity	564	3.6649	3
Capital appreciation	564	2.3351	2
Tax benefit	564	5.3262	6
Diversification benefit	564	3.9273	4
Take part in CSR	564	6.8121	7

*Source: Primary data*

Table 5.18 clearly shows that the most influential factor that attracts investors to the stock market is the return from the investment, with a mean rank of 1.1099. This means that most investors are interested in increasing their return through the stock market. The second most influential factor attracting investors is the capital appreciation they get from their financial assets, with a mean rank of 2.3351, followed by liquidity, with a mean rank of 3.6649. Diversification benefits, safety, tax benefits,

and participation in corporate social responsibility were found to be less influential motivations, with mean ranks of 3.9273, 4.8191, 5.3262, and 6.8121, respectively.

It is clear from the Table 5.18 that the investors are mainly driven by the potential for return and capital appreciation, with safety, liquidity, and diversification playing a secondary role in their investment decisions and participation in corporate social responsibility being the least important motivator.

### 5.3.7.1. Motives and their Influence on Investing in the Stock Market

To study whether there is any significant difference in the influence of motives for investing in the stock market, a hypothesis was formed and tested with the help of the Friedman test.

**H<sub>0</sub>:** There is no significant difference in the influence of motives for investing in the stock market

**H<sub>1</sub>:** There is a significant difference in the influence of motives for investing in the stock market

The above hypothesis is validated using the Friedman test and the result is exhibited below in Table 5.19.

**Table 5.19**  
**Result of Friedman test**

Motives	Mean Rank (Influence)	Chi-square	DF	P value
Return	1.11	2607.785	6	<0.001
Safety	4.82			
Liquidity	3.67			
Capital appreciation	2.34			
Tax benefit	5.33			
Diversification benefit	3.93			
Take part in CSR	6.81			

*Source: Primary data*



A Friedman test was carried out to find the significant difference in the influence of motives on investing in the stock market. The result showed that the Sig. value (p) is less than 0.001, which means the null hypothesis is rejected. This indicates a significant difference between the influences of the various motivations on stock market investment and that all the motives have a significantly different influence on trading securities.

### 5.3.8. Kind of Investment Preferred

The return and risk characteristics are different for different investment alternatives and the return and risk expectations of investors are also different. It is assumed that when risk is high, the return will also be high; when the risks is low, the return will also be low. Investors can be classified into three categories based on risk expectations: risk takers, risk neutrals, and risk averters. Risk takers usually invest in highly risky investment avenues, risk neutrals invest in medium-risk investment options, and risk averters invest in risk-free investment options.

**Table 5.20**  
**Kind of Investment Preferred**

<b>Kind of investment</b>	<b>Frequency</b>	<b>Percentage</b>
High risk - High return	182	32.3
Low risk - Low return	53	9.4
Normal risk-Normal return	329	58.3
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It is seen from Table 5.20 that the majority of the investors, 329 investors (58.3 per cent) favoured investments with normal risk and normal return characteristics. The second most popular option was high risk-high return investments selected by 182 (32.3 per cent) investors. Only 53 (9.4 per cent) investors chose investments with low risk and returns, which was the least preferred option.

### 5.3.8.1. Kind of Investment Preferred and Experience in the Stock Market

A comparison is made between the kind of investment preferred by the respondents and their experience in the stock market. The result of the comparison is disclosed in Table 5.21.

**Table 5.21**  
**Comparison of Kind of Investment Preferred and Experience in the Stock Market**

	Kind of Investment interested						Total
	High Risk - High Return		Low Risk - Low Return		Normal Risk-Normal Return		
Experience	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
Below one year	36	27.27%	24	18.18%	72	54.54%	132
1- 3 years	59	37.11%	7	44.03%	93	58.49%	159
3-5 years	44	28.39%	9	58.06%	102	65.81%	155
5-10 years	30	31.25%	13	13.54%	53	55.21%	96
Above 10 years	13	59.09	0	0	9	40.91%	22
<b>Total</b>	<b>182</b>	<b>32.27%</b>	<b>53</b>	<b>9.4%</b>	<b>329</b>	<b>58.33%</b>	<b>564</b>

*Source: Primary data*

Table 5.21 illustrates the relationship between respondents' stock market experience and their preferred type of investment. The table reveals that more than half of the investors (54.54 per cent) with less than one year of experience prefer investments with normal risk - normal return characteristics. These investors may favour investments with normal risk and return characteristics due to a lack of experience. Additionally, 27.27 per cent of investors with below one year of experience chose high risk - high return securities and 18.18 per cent chose low risk - low return securities. The table also shows that most respondents (93 investors) with 1-3 years of experience also prefer normal risk - normal return securities. Meanwhile, 44.03 per cent prefer low risk - low return securities and 37.11 per cent prefer high risk - high return securities.

Similarly, most investors in the 3-5 years and 5-10 years categories also prefer normal risk-normal return securities. However, highly experienced investors with more than 10 years of experience prefer high risk - high return securities and normal risk - normal return securities, with no one showing interest in low risk-low return securities. Their vast experience may have led to their confidence in investing in high risk and normal risk investment alternatives.

It is evident that the majority of investors prefer normal risk - normal return securities (58.33 per cent), followed by high risk - high return securities (32.27 per cent), with low risk - low return securities being the least preferred (9.4 per cent).

### 5.3.9. Action Preferred by Investors if Share Trading Gives Negative Results

Share markets are highly volatile and stock prices fluctuate constantly due to changes in market activity. Thus, share trading can result in both profits and losses. When share trading results in a loss, investors may consider various actions, such as withdrawing their investment, waiting for the loss to be recovered before withdrawing, investing more since the market is cheap, or reallocating their investment to other stocks. Table 5.22 lists investors' preferred and non-preferred actions when the share price falls in the market.

**Table 5.22**

#### **Action Preferred by Investors if Share Trading Gives Negative Results**

Action	Preferred		Not preferred	
	Frequency	Percentage	Frequency	Percentage
Withdraw money from the investment	105	18.6%	459	81.4%
Wait till the loss is recovered and then withdraw the money	143	25.4%	421	74.6%
Opt to invest more since the market is comparatively cheaper	167	29.6%	397	70.4%
Reinvest money in other stocks	87	15.4%	477	84.6%
Will invest a part in alternative strategies	18	3.2%	546	96.8%
Others	44	7.8%	519	92%

*Source: Primary data*

It can be observed from Table 5.22 that investors prefer different actions when faced with negative results in share trading. The most popular action, preferred by 29.6 per cent of the investors, is to invest more since the market is cheaper. This might result from investors believing they can benefit when share prices increase. 25.4 per cent of the respondents chose to wait for the loss to be recovered before withdrawing their money. On the other hand, 18.6 per cent of the investors opted to withdraw their money from the investment immediately. Some investors (15.4 per cent) decided to reinvest their money in other stocks. Only a small percentage, 3.2%, chose to invest in alternative strategies. The others category, which includes a variety of options proposed by the respondents, such as opting for a stop loss, averaging the price, thoroughly studying the situation and switching strategies, was preferred by 44 respondents. Overall, it appears that most investors in the market tend to either wait for their losses to recover or to invest more when the market is cheaper. A smaller number of respondents prefer to withdraw their money from the investment or reinvest in other stocks, and an even smaller number opt for alternative strategies.

#### **5.4. Awareness on Socially Responsible Investment**

The first objective of this study is to estimate the awareness level on socially responsible investment by the stock market investors in Kerala. To achieve this objective, data was collected from primary sources and analysed with the help of suitable tools. The awareness is studied under four heads and they include:

- Awareness on different aspects of Socially responsible investment
- Awareness on sustainability-themed indices
- Awareness on sustainability-themed funds
- General awareness related to sustainability

The data on awareness on the four dimensions above was collected from the respondents by using a five-point scale and the responses were quantified by allotting 5 points to 'Extremely aware', 4 points to 'Moderately aware', 3 points to 'Somewhat aware', 2 points to 'Slightly aware' and 1 point to 'Not at all aware'. The awareness on each variable was determined by calculating the arithmetic mean of all respondents' responses. The overall awareness on different aspects of socially responsible investment was calculated using the mean percentile score (MPS), which was

determined by considering all four dimensions. The four dimensions were calculated, and the overall awareness was calculated using the variables from all four dimensions.

$$\text{MPS} = \frac{\text{Total Score of all variables}}{\text{Maximum Score}} \times 100$$

#### 5.4.1. Awareness on Different Aspects of Socially Responsible Investment

SRI is a broad concept with many aspects and facets. To evaluate awareness levels on socially responsible investments, it is also necessary to evaluate the awareness on related concepts. Table 5.23 presents the awareness levels of the investors in Kerala towards the concept of socially responsible investments and its related concepts.

**Table 5.23**  
**Awareness on Different Aspects of Socially Responsible Investment**

Concepts	N	Mean	Std. Deviation
Socially responsible investment	564	2.6401	1.44646
Ethical investment	564	3.1223	1.41331
Community investment	564	2.3706	1.31770
ESG investment	564	2.4699	1.41577
Sustainable investment	564	2.5027	1.42471
Mission-based investment	564	2.5550	1.44852
Impact investment	564	2.2092	1.34423
Islamic investment	564	2.4929	1.51779
Green bond	564	2.1915	1.31754
Green governance	564	2.2642	1.38607

*Source: Primary data*

The mean and standard deviation of the respondents' awareness on different aspects of socially responsible investing are shown in Table 5.23. The highest mean score, 3.1223, for the concept of ethical investing indicates that respondents are aware of it. Socially responsible investing comes in second place with a mean score of 2.6401, but the degree of awareness is comparatively very low. With a standard deviation of 1.31754, the Green Bond has the lowest mean score (2.1915). With mean

scores ranging from 2.1915 to 2.5550, the other concepts, such as community investment, ESG investing, sustainable investment, mission-based investment, impact investment, Islamic investment, green bonds, and green governance, have lower levels of awareness. In general, the data suggests that the participants have a moderate to low understanding of concepts related to socially responsible investment, with ethical investment being the most widely known among them.

#### 5.4.2. Awareness on Sustainability-themed Indices

There are several social responsibility-themed indexes and funds available in India. These funds are an option for investors who want to earn financial and non-financial gains. The S&P BSE 100 ESG Index, S&P BSE CARBONEX, and S&P BSE GREENEX are three social responsibility-themed indexes offered by the Bombay Stock Exchange (BSE). The NIFTY100 ESG Index and the NIFTY 100 Enhanced ESG Index are two social responsibility-themed indexes offered by the National Stock Exchange (NSE). MSCI ESG India Index is also an ESG-based index offered in India. Table 5.24 shows the degree of awareness on different sustainability-themed indices by the investors in Kerala.

**Table 5.24**  
**Awareness on Sustainability-themed Indices**

Indices	N	Mean	Std. Deviation
S&P BSE 100 ESG Index	564	2.8191	1.49573
S&P BSE CARBONEX	564	2.2642	1.36802
S&P BSE GREENEX	564	2.2234	1.32864
NIFTY100 ESG Index	564	2.6809	1.46271
NIFTY 100 Enhanced ESG Index	564	2.4894	1.43475
MSCI ESG India Index	564	2.2465	1.33057

*Source: Primary data*

The investors' awareness on various sustainability-themed indices is depicted in Table 5.24 and it is evaluated by using mean and standard deviation. The S&P BSE 100 ESG Index has the highest mean score of 2.8191 and a standard deviation of 1.49573, followed by the Nifty 100 ESG Index, which has a mean score of 2.6809 and a standard deviation of 1.46271. The mean score is the lowest (2.2234) for the S&P

BSE GREENEX, with a standard deviation 1.32864. It can be observed that the average level of awareness is relatively low for all indices, with mean scores ranging from 2.2234 to 2.8191. These results imply that investors have a low level of knowledge of sustainability-themed indices.

### 5.4.3. Awareness on Sustainability-themed Funds

In India, there are several funds with social responsibility themes. Sustainability-themed funds or socially responsible mutual funds are a type of mutual fund that considers not only traditional financial performance metrics but also environmental, social, or ethical factors in the investment decision-making process. These funds seek to invest in companies meeting specific social, environmental, or ethical criteria or considering certain CSR standards (Nilsson, 2008). Table 5.25 exhibits how knowledgeable the investors in Kerala are about several sustainability-themed funds.

**Table 5.25**  
**Awareness on Sustainability-themed Funds**

<b>Funds</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
SBI Magnum Equity ESG Fund	564	2.3582	1.43643
Tata Ethical Fund	564	2.6773	1.49794
Nippon India Shariah BeEs	564	2.4131	1.46040
Axis ESG Equity Fund	564	2.2518	1.38133
Quantum India ESG Equity Fund	564	2.0727	1.29764
Taurus Ethical Fund	564	2.3582	1.43643
Avendus India ESG Fund	564	2.6791	1.49773
Mirae Asset ESG Sector Leaders ETF	564	2.0727	1.29764
Aditya Birla Sun Life ESG fund	564	2.4131	1.46040
ICICI prudential ESG fund	564	2.2500	1.38101
Kotak ESG opportunities fund	564	2.2004	1.38910
Quant ESG equity fund	564	1.9752	1.25565
Invesco ESG equity fund	564	2.1667	1.37106
HSBC Global Equity Climate Change Fund of Fund	564	2.2234	1.37592

*Source: Primary data*

Table 5.25 illustrates investor knowledge of key sustainability-related funds and assesses it using mean and standard deviation. The Avendus India ESG Fund has the highest mean score of 2.6791 and a standard deviation of 1.49773, followed by the Tata Ethical Fund, which has a mean score of 2.6773 and a standard deviation of 1.49794. The mean score is the lowest (1.9752) for the Quant ESG equity fund, with a standard deviation 1.32864. The mean score for awareness across all funds is low, with values ranging from 1.9752 to 2.6791. This data also suggests that investors have a low level of awareness regarding sustainability-themed funds.

#### 5.4.4. General Awareness Related to Sustainability

General awareness on sustainability is measured based on investors' familiarity with the CSR activities undertaken by the companies, as well as their knowledge of sustainability reporting, ESG scores, sustainability rating agencies, and the companies that make up social responsibility-themed indices. Table 5.26 portrays the general awareness of investors concerning sustainability.

**Table 5.26**  
**General Awareness Related to Sustainability**

<b>Sustainability related variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Noticing the CSR initiatives of invested companies	564	2.6525	1.24872
Awareness on sustainability reporting of companies	564	2.6099	1.32618
Noticing the companies that are doing sustainability reporting	564	2.4645	1.34223
Received information about sustainability rating agencies	564	2.2570	1.3015
Received information about ESG (Environment, Social and Governance) scores of companies	564	2.1986	1.28784
Noticed the companies that constitute sustainability-themed indices	564	2.2482	1.32019

*Source: Primary data*



Table 5.26 presents the awareness level of investors about CSR activities, corporate sustainable practices and other variables related to sustainability. Noticing of CSR initiatives of the companies has the highest mean score (2.6525) compared to other variables. Even though it is the highest among them, the mean score of all the variables is low. The mean score is lowest (2.1986) for the awareness on information related to ESG scores of the companies. This data also suggests a low level of awareness on the part of investors with respect to sustainability.

#### **5.4.5. The Relationship between Demographic Variables and Awareness on Socially Responsible Investment**

To determine the existence of any relationship between demographic variables and awareness on socially responsible investment, hypotheses are formulated and tested with the help of suitable statistical tools. The demographic variables such as gender, age, educational qualification, occupation, marital status and average annual income are compared with different dimensions of SRI awareness and overall SRI awareness.

##### **5.4.5.1. The Relationship between Gender and Awareness on Socially Responsible Investment**

A gender-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

###### **5.4.5.1.1. Awareness on Different Aspects of Socially Responsible Investment: Gender-wise Comparison**

A comparison is made between awareness on different aspects of socially responsible investment across different genders. The mean and standard deviation of the awareness are presented in Table 5.27.

**Table 5.27**  
**Mean & Standard Deviation Showing Gender-wise Awareness on Different**  
**Aspects of Socially Responsible Investment**

Variables	Male		Female		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.5853	1.42669	2.8718	1.51167	2.3846	1.38675
Ethical investment	3.0553	1.43099	3.3590	1.32262	3.2308	1.48064
Community investment	2.3249	1.31538	2.5470	1.32935	2.3077	1.25064
ESG investment	2.4194	1.39752	2.6325	1.46569	2.6923	1.54837
Sustainable investment	2.4550	1.39888	2.6581	1.50380	2.6923	1.54837
Mission-based investment	2.5300	1.44819	2.6068	1.46191	2.9231	1.38212
Impact investment	2.1728	1.32138	2.3590	1.44115	2.0769	1.18754
Islamic investment	2.4724	1.52740	2.5812	1.49274	2.3846	1.50214
Green bond	2.1359	1.29395	2.4274	1.39776	1.9231	1.18754
Green governance	2.1982	1.35326	2.5128	1.48913	2.2308	1.36344
<b>Total Awareness on Different Aspects of Socially Responsible Investment</b>	<b>48.7483</b>	<b>22.12577</b>	<b>53.1111</b>	<b>21.54137</b>	<b>49.6923</b>	<b>21.14783</b>

*Source: Primary data*

Table 5.27 compares the degree of gender-specific awareness of key socially responsible investment-related concepts. The mean and standard deviation reveal that respondents of all genders have little understanding of various aspects of SRI, with mean scores ranging from 1.9231 to 3.3590 and standard deviations from 1.18754 to 1.54837. All genders had the highest mean score for ethical investment, with averages of 3.0553 for males, 3.3590 for females, and 3.2308 for those who identified as others. This implies that ethical investing is something respondents of all genders know. For other aspects of SRI, the mean score is low for all genders. The data shows that female investors have a slightly higher level of awareness (mean score is 53.1111) about different aspects of SRI compared to male investors (mean score is 48.7483) and the other category (mean score is 49.6923). Moreover, the other category investors have a slightly higher overall awareness on various aspects of SRI than male

investors. The data suggests a lack of proper understanding of various aspects of SRI among individuals of all gender groups.

#### 5.4.5.1.1.1. Results of Kruskal-Wallis H Test of Gender-wise Awareness on Different Aspects of Socially Responsible Investment

To identify whether there is any difference in awareness on different aspects of SRI and gender, a hypothesis was developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different genders.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different genders.

A non-parametric alternative, the Kruskal-Wallis H test, was used to test the hypothesis because the data was found to be non-normal. The results of the test are presented in Table 5.28.

**Table 5.28**

#### Results of Kruskal-Wallis H Test of Gender-wise Awareness on Different Aspects of Socially Responsible Investment

Dependent Variable	Independent variable (Gender)	N	Mean Rank	Kruskal-Wallis H	P value
Awareness on Different Aspects of Socially Responsible Investment	Male	433	274.46	4.270	0.118
	Female	117	309.42		
	Others	13	286.35		
	Total	563			

*Source: Primary data*

It can be seen from Table 5.28 that the p-value (Sig. value 0.118) is greater than 0.05, so the null hypothesis is accepted. This implies that there is no significant difference in the level of awareness among investors of different genders regarding various aspects of SRI.

#### 5.4.5.1.2. Awareness on Sustainability-themed Indices: Gender-wise Comparison

Table 5.29 compares the level of awareness about various sustainability-themed indices among different genders. The mean and standard deviation are shown to provide an understanding of the level of awareness about sustainability-themed indices among investors of different genders.

**Table 5.29**  
**Mean & Standard Deviation Showing Gender-wise Awareness on Sustainability-themed Indices**

Variables	Gender					
	Male		Female		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	2.8134	1.48424	2.8974	1.53906	2.3077	1.49358
S&P BSE CARBONEX	2.2005	1.35036	2.5214	1.42996	2.0769	1.18754
S&P BSE GREENEX	2.1705	1.32255	2.4359	1.35433	2.0769	1.18754
NIFTY100 ESG Index	2.6290	1.44912	2.8974	1.50508	2.4615	1.45002
NIFTY 100 Enhanced ESG Index	2.4171	1.41055	2.7949	1.50596	2.1538	1.28103
MSCI ESG India Index	2.2189	1.33024	2.3590	1.34204	2.1538	1.28103
<b>Total Awareness on Sustainability-themed indices</b>	<b>48.1644</b>	<b>24.94612</b>	<b>53.0199</b>	<b>25.88281</b>	<b>44.1026</b>	<b>24.68895</b>

*Source: Primary data*

The level of awareness of various sustainability-themed indices among investors of all genders is shown in Table 5.29. For the S&P BSE 100 ESG Index and NIFTY100 ESG Index across all gender groupings, the mean scores are somewhat higher. The S&P BSE 100 ESG Index for men has a mean score of 2.8134 and a standard deviation of 1.48424. The mean score for the same index for females is

2.8974, with a standard deviation of 1.53906, while the mean score for those who identify as others is 2.3077, with a standard deviation of 1.49358. According to the data, female investors had a slightly higher mean score for all sustainability indices than male and others category investors, indicating a somewhat greater degree of awareness. However, the overall data suggest a lack of proper awareness about various sustainability-themed indices among individuals of all genders.

#### 5.4.5.1.2.1. Results of Kruskal-Wallis H Test of Gender-wise Awareness on Sustainability-themed Indices

To test if there is any difference in awareness about sustainability-themed indices and gender, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different genders.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different genders.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test, was used because the data was found to be non-normal. The results of the test are presented in Table 5.30.

**Table 5.30**  
**Results of Kruskal-Wallis H Test of Gender-wise Awareness on Sustainability-themed Indices**

Dependent Variable	Independent variable (Gender)	N	Mean Rank	Kruskal-Wallis H	P value
Awareness on Sustainability-themed Indices	Male	434	277.03	3.741	0.154
	Female	117	306.68		
	Others	13	247.50		
	Total	564			

*Source: Primary data*

Table 5.30 depicts that the p-value (Sig value. 0.154) is greater than 0.05, meaning the null hypothesis is accepted. This means there is no significant difference in the level of awareness of various sustainability-themed indices among investors of different genders.

#### 5.4.5.1.3. Awareness on Sustainability-themed Funds: Gender-wise Comparison

The awareness level of different genders about sustainability-themed funds is illustrated in Table 5.31. The mean and standard deviation are presented to give an insight into the level of understanding regarding sustainability-themed funds among individuals of different genders.

**Table 5.31**  
**Mean & Standard Deviation Showing Gender-wise Awareness on Sustainability-themed Funds**

Variables	Gender					
	Male		Female		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.2903	1.41700	2.6496	1.49894	2.0000	1.22474
Tata Ethical Fund	2.6313	1.49133	2.8547	1.51011	2.6154	1.60927
Nippon India Shariah BeEs	2.3779	1.43692	2.5726	1.54427	2.1538	1.46322
Axis ESG Equity Fund	2.2074	1.36209	2.4530	1.46509	1.9231	1.11516
Quantum India ESG Equity Fund	2.0276	1.26388	2.2906	1.42671	1.6154	.96077
Taurus Ethical Fund	2.2903	1.41700	2.6496	1.49894	2.0000	1.22474
Aventus India ESG Fund	2.6336	1.49112	2.8547	1.51011	2.6154	1.60927
Mirae Asset ESG Sector Leaders ETF	2.0276	1.26388	2.2906	1.42671	1.6154	.96077
Aditya Birla Sun Life ESG fund	2.3779	1.43692	2.5726	1.54427	2.1538	1.46322
ICICI prudential ESG fund	2.2051	1.36159	2.4530	1.46509	1.9231	1.11516

Kotak ESG opportunities fund	2.1406	1.36808	2.4188	1.43982	2.2308	1.53590
Quant ESG equity fund	1.9424	1.23232	2.1453	1.35357	1.5385	.96742
Invesco ESG equity fund	2.1336	1.34752	2.3077	1.45307	2.0000	1.41421
HSBC Global Equity Climate Change Fund of Fund	2.1820	1.35808	2.4103	1.45124	1.9231	1.18754
<b>Total Awareness on Sustainability-themed Funds</b>	<b>44.9539</b>	<b>24.27630</b>	<b>49.8901</b>	<b>26.36502</b>	<b>40.4396</b>	<b>20.62282</b>

Source: Primary data

Table 5.31 presents the mean and standard deviation of the awareness levels for various sustainability-themed funds for men, women, and others. The table reveals that the individual mean scores of the funds range from 1.23232 to 2.8547, and the total mean awareness score for all the sustainability-themed funds listed in the table is 44.9539 for male respondents, 49.8901 for female respondents, and 40.4396 for the others category, with corresponding standard deviations of 24.27630, 26.36502, and 20.62282. This indicates that investors from all genders are not particularly familiar with funds with a sustainability focus. It is also clear from the table that female investors have a slightly greater level of knowledge than males and those in the other group.

#### 5.4.5.1.3.1. Results of Kruskal-Wallis H Test of Gender-wise Awareness on Sustainability-themed Funds

A hypothesis was developed to examine the relationship between gender and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different genders.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different genders.

To test this hypothesis, the non-parametric Kruskal-Wallis H test was used as the data was found to be non-normal. The results are presented in Table 5.32.

**Table 5.32****Results of Kruskal-Wallis H Test of Gender-wise Awareness on Sustainability-themed Funds**

Dependent Variable	Independent variable (Gender)	N	Mean Rank	Kruskal-Wallis H	P value
Awareness on Sustainability-themed Funds	Male	434	276.26	3.864	0.145
	Female	117	308.17		
	Others	13	259.65		
	Total	564			

Source: Primary data

The results of the test show that the p-value, with a significance of 0.145, is greater than 0.05. This means that the null hypothesis is accepted and that there is no significant difference in the level of awareness of various sustainability-themed funds among investors of different genders.

**5.4.5.1.4. General Awareness Related to Sustainability: Gender-wise Comparison**

The general awareness on sustainability is compared with different genders and exhibited in Table 5.33. The mean and standard deviation are included to demonstrate the extent of general awareness about sustainability among investors of different genders.

**Table 5.33****Mean and Standard Deviation Showing Gender-wise General Awareness Related to Sustainability**

Variables	Gender					
	Male		Female		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.6590	1.25458	2.7009	1.23362	2.0000	1.08012



Awareness on sustainability reporting of companies	2.6290	1.32943	2.5726	1.30196	2.3077	1.49358
Noticing the companies that are doing sustainability reporting	2.4862	1.36131	2.4444	1.26930	1.9231	1.32045
Received information about sustainability rating agencies	2.286	1.3218	2.205	1.2494	1.769	1.0127
Received information about ESG (Environment, Social and Governance) scores of companies	2.2051	1.29375	2.2137	1.29873	1.8462	.98710
Noticed the companies that constitute sustainability-themed indices	2.2535	1.33190	2.2222	1.29396	2.3077	1.25064
<b>General Awareness Related to Sustainability</b>	<b>48.3948</b>	<b>18.92705</b>	<b>47.8632</b>	<b>18.40093</b>	<b>40.5128</b>	<b>13.32265</b>

*Source: Primary data*

The mean and standard deviation of general sustainability awareness for males, females, and other groups are shown in Table 5.33. The comparison of mean values across all genders reveals variations in the degree of sustainability awareness among the various categories. Compared to women, men appear to be slightly more aware of sustainability on the whole. Males scored an average of 48.3948, while females scored an average of 47.8632. However, the difference in mean scores is not particularly substantial, and both males and females show almost the same levels of general sustainability awareness. Both groups' standard deviations are likewise quite similar. The others category had a lower mean score, 40.5128, indicating that they were less aware of sustainability than men and women.

Overall, the mean score range is between 40.5128 and 48.3948, which shows that investors across all genders have a relatively low degree of knowledge of general sustainability.

#### 5.4.5.1.4.1. Result of Kruskal-Wallis H test of Gender-wise General awareness Related to Sustainability

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and gender.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different genders.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different genders.

The data was found to be non-normal; thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between gender and general awareness related to sustainability. The results of the test are presented in Table 5.34.

**Table 5.34**  
**Result of Kruskal-Wallis H Test of Gender-wise General Awareness Related to Sustainability**

Dependent Variable	Independent variable (Gender)	N	Mean Rank	Kruskal-Wallis H	P value
General awareness related to Sustainability	Male	434	284.57	2.035	0.361
	Female	117	281.85		
	Others	13	219.27		
	Total	564			

*Source: Primary data*

The Kruskal-Wallis H test result showed a value of 2.035 and a p-value of 0.361 (Sig. value 0.361). As the p-value is greater than 0.05, it can be concluded that there is no significant difference in general awareness related to sustainability among the different genders. The results of the Kruskal-Wallis H test indicate that gender does not significantly impact an individual's general awareness related to sustainability.

#### 5.4.5.1.5. Overall Awareness and Dimensions: Gender-wise Comparison

A gender-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.35 exhibits the different dimensions of SRI awareness and overall SRI awareness with respect to gender.

**Table 5.35**  
**Mean & Standard Deviation Showing Gender-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Gender					
	Male		Female		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on different aspects of socially responsible investment	48.7483	22.12577	53.1111	21.54137	49.6923	21.14783
Awareness on sustainability-themed indices	48.1644	24.94612	53.0199	25.88281	44.1026	24.68895
Awareness on sustainability-themed funds	44.9539	24.27630	49.8901	26.36502	40.4396	20.62282
General awareness related to sustainability	48.3948	18.92705	47.8632	18.40093	40.5128	13.32265
<b>Overall Awareness on Socially Responsible Investment</b>	<b>47.5742</b>	<b>17.21099</b>	<b>50.9711</b>	<b>18.11943</b>	<b>43.6868</b>	<b>13.37398</b>

*Source: Primary data*

Table 5.35 shows that the level of awareness about the various dimensions of SRI and overall awareness of socially responsible investment (SRI) is low across all genders, with mean scores ranging from 40.4396 to 53.1111 and standard deviations from 13.32265 to 26.3652. Female investors appear to have slightly more awareness than male investors and those identifying as others with respect to various aspects of

SRI. Regarding various aspects of SRI, SRI-themed indices, SRI-themed funds, and overall SRI awareness, female investors tend to have more awareness than male investors and those identifying as others do. Compared to female investors, who had a mean score of 50.9711, male investors and others have a mean score of 47.5742 and 43.6868, respectively, for overall SRI knowledge. This data indicates that investors of all genders lack a general understanding and overall understanding of the many aspects of socially responsible investment.

**5.4.5.1.5.1. Result of Kruskal-Wallis H Test of Gender-wise Comparison of Overall Awareness on SRI**

A hypothesis was formulated to examine whether there is any significant difference in the overall awareness on socially responsible investment among different genders.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different genders.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different genders.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.36.

**Table 5.36**  
**Result of Kruskal-Wallis H Test of Gender-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Gender)</b>	<b>N</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H test</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Male	433	276.31	4.036	0.133
	Female	117	307.23		
	Others	13	244.46		
	Total	563			

*Source: Primary data*

The Kruskal-Wallis H test results show that the p-value is greater than 0.05 (Sig value. 0.133), and thus, the null hypothesis is accepted. That is, there is no significant difference in the overall awareness on socially responsible investment among different genders.

According to the overall findings, there is no clear association between gender and an awareness of various facets of socially responsible investing. It is also found that there is no significant relationship between gender and overall awareness on socially responsible investment. The Kruskal-Wallis H test findings did not reveal any statistically significant differences in the degree of knowledge about various elements of socially responsible investing (SRI) among investors of different genders. In other words, there is no apparent gender difference in the degree of SRI awareness. The p-values from the tests are higher than 0.05, which means there is not enough data to disprove the null hypothesis that there is not a significant difference in gender-related awareness levels. Overall, the results indicate that investors of all genders have a poor knowledge of SRI.

#### **5.4.5.2. The Relationship between Age and Awareness on Socially Responsible Investment**

An age-wise comparison is made concerning different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

##### **5.4.5.2.1. Awareness on Different Aspects of Socially Responsible Investment: Age-wise Comparison**

A comparison is made between awareness on different aspects of socially responsible investment across different age groups. The mean and standard deviation of the awareness are presented in Table 5.37.

**Table 5.37****Mean & Standard Deviation Showing Age-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Age group					
	Up to 30 years		30-60 years		Above 60 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.8189	1.41718	2.4794	1.45486	3.8333	.75277
Ethical investment	3.2675	1.36910	2.9905	1.43985	4.1667	.75277
Community investment	2.4568	1.26343	2.2825	1.35187	3.5000	1.04881
ESG investment	2.5391	1.43794	2.4063	1.40289	3.0000	1.09545
Sustainable investment	2.5744	1.45066	2.4476	1.41634	2.5000	.54772
Mission-based investment	2.5761	1.47897	2.5397	1.43462	2.5000	1.04881
Impact investment	2.2675	1.36608	2.1429	1.31451	3.3333	1.63299
Islamic investment	2.5350	1.50818	2.4540	1.51855	2.8333	2.04124
Green bond	2.3045	1.33835	2.0825	1.28917	3.3333	1.21106
Green governance	2.3827	1.43078	2.1587	1.34504	3.0000	1.26491
<b>Total Awareness on Different Aspects of Socially Responsible Investment</b>	<b>51.5455</b>	<b>22.65985</b>	<b>47.9683</b>	<b>21.48053</b>	<b>64.0000</b>	<b>12.71220</b>

*Source: Primary data*

The age-wise awareness on different aspects of socially responsible investment (SRI) is examined using mean and standard deviation and exhibited in Table 5.37. The study has grouped the respondents into three age groups: Up to 30 years, 30-60 years, and Above 60 years. The mean scores for different aspects of SRI vary among the age groups. The older age group of above 60 years has the highest mean score for socially responsible investment, ethical investment, community investment, ESG investment, impact investment, Islamic investment, green bond, and green governance. This indicates that older individuals are more aware of different aspects of SRI compared to younger age groups. The mean score for mission-based

and sustainable investments is greatest for the youngest age group, up to 30. The awareness level is low for all other aspects of SRI among the younger investors. With a mean score ranging from 2.0825 to 2.9905, the respondents' degree of awareness was limited to those between 30 and 60.

It is evident from the Table 5.37 that compared to other aspects, ethical investing has the highest degree of awareness across all age groups, with a mean score that ranges from 2.9905 to 4.1667. The oldest age group has the greatest overall awareness score for various SRI aspects (with a mean score of 64), followed by the youngest age group (with a mean score of 51.5455) and the middle-aged group (with a mean score of 47.9683). This may imply that; age is a factor in determining the awareness on SRI. The age increases the level of awareness on SRI among the investors. From the study, it is found that older people are typically more informed about various concepts related to SRI. Although respondents over sixty years of age had the highest awareness levels, the data reveals that overall awareness is low, with individual mean scores ranging from 2.0825 to 4.1667 and an overall mean score between 47.9683 and 64.0000. These findings show that investors across all age groups have low to moderate awareness on different aspects of SRI.

#### **5.4.5.2.1.1. Results of Kruskal-Wallis H Test of Age-wise Awareness on Different Aspects of Socially Responsible Investment**

To identify whether there is any difference in awareness on different aspects of SRI and age, a hypothesis was developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different age groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different age groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test, was used because the data was found to be non-normal. The results of the test are presented in Table 5.38.

**Table 5.38****Results of Kruskal-Wallis H Test of Age-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Age group)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Up to 30 years	294.67	6.634	0.036
	30-60 years	269.93		
	Above 60 years	404.83		

*Source: Primary data*

Table 5.38 shows the results of the Kruskal-Wallis H tests. It can be seen from the Table 5.38 that the p-value (Sig. value 0.036) is less than 0.05, so the null hypothesis is rejected. This implies a significant difference in the level of awareness about various aspects of SRI among individuals of different age groups.

**5.4.5.2.2. Awareness on Sustainability-themed Indices: Age-wise Comparison**

A comparison is made between the level of awareness about various sustainability-themed indices and different age groups. The mean and standard deviation are shown to provide an understanding of the level of awareness about sustainability-themed indices among investors of different age groups.

**Table 5.39****Mean & Standard Deviation Showing Age-wise Awareness on Sustainability-themed Indices**

<b>Variables</b>	<b>Age group</b>					
	<b>Up to 30 years</b>		<b>30-60 years</b>		<b>Above 60 years</b>	
	<b>Mean</b>	<b>Std. Deviation</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Mean</b>	<b>Std. Deviation</b>
S&P BSE 100 ESG Index	2.8807	1.47084	2.7619	1.51336	3.3333	1.63299
S&P BSE CARBONEX	2.4074	1.37671	2.1619	1.35527	1.8333	1.32916
S&P BSE GREENEX	2.3169	1.32147	2.1587	1.33314	1.8333	1.32916



NIFTY100 ESG Index	2.8930	1.47600	2.5111	1.43291	3.0000	1.54919
NIFTY 100 Enhanced ESG Index	2.7037	1.46680	2.3270	1.39302	2.3333	1.36626
MSCI ESG India Index	2.4074	1.36465	2.1238	1.29203	2.1667	1.47196
<b>Total Awareness on Sustainability-themed Indices</b>	<b>52.0302</b>	<b>25.26977</b>	<b>46.8148</b>	<b>24.98930</b>	<b>48.3333</b>	<b>22.97341</b>

Source: Primary data

Table 5.39 displays the relationship, if any, between the age of the investors and awareness on different sustainability-themed indices. The table points out that, for the S&P BSE 100 ESG Index and NIFTY100 ESG Index, the mean awareness score is highest for the above 60 years age group, while for the S&P BSE CARBONEX, S&P BSE GREENEX, NIFTY 100 Enhanced ESG Index, and MSCI ESG India Index, it is highest for the up to 30 years age group. All age groups of respondents have lower levels of awareness, with mean scores ranging from 2.3169 to 2.8930 for those under 30 years old, 2.1238 to 2.7619 for those between 30 and 60 years old, and mean scores from 1.8333 to 3.3333 for those over 60 years old.

The overall awareness on SRI-themed indices shows that it is highest for the up to 30 years age group (mean score 52.0302), followed by the above 60 years age group (mean score 48.3333) and the 30-60 years age group (mean score 46.8148). This implies that young investors under 30 are slightly more aware of sustainability-themed indexes than investors of other age categories. However, the degree of awareness is comparatively less across all age groups, with an overall mean score ranging from 46.8148 to 52.0302.

#### **5.4.5.2.2.1. Results of Kruskal-Wallis H Test of Age-wise Awareness on Sustainability-themed Indices**

To test if there is any difference in awareness about sustainability-themed indices and age, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different age groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different age groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.40.

**Table 5.40**  
**Results of Kruskal-Wallis H Test of Age-wise Awareness on Sustainability-themed Indices**

<b>Dependent Variable</b>	<b>Independent variable (Age group)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Indices	Up to 30 years	302.30	6.540	0.038
	30-60 years	267.11		
	Above 60 years	288.42		

*Source: Primary data*

It is evident from Table 5.40 that the p-value (Sig value. 0.038) is less than 0.05, which means the null hypothesis is rejected. This means there is a significant difference in the level of awareness of various sustainability-themed indices among investors of different age groups.

#### **5.4.5.2.3. Awareness on Sustainability-themed Funds: Age-wise Comparison**

A comparison is made between the level of awareness about various sustainability-themed funds and different age groups. The mean and standard deviation are shown to provide an understanding of the level of awareness about sustainability-themed funds among investors of different age groups.

**Table 5.41**  
**Mean & Standard Deviation Showing Age-wise Awareness on**  
**Sustainability-themed Funds**

Variables	Age group					
	Up to 30 years		30-60 years		Above 60 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.5309	1.46095	2.2032	1.40177	3.5000	1.04881
Tata Ethical Fund	2.7654	1.45969	2.5905	1.52492	3.6667	1.21106
Nippon India Shariah BeEs	2.5267	1.43535	2.3111	1.47323	3.1667	1.47196
Axis ESG Equity Fund	2.3457	1.39207	2.1587	1.36618	3.3333	1.21106
Quantum India ESG Equity Fund	2.1852	1.32157	1.9714	1.26786	2.8333	1.47196
Taurus Ethical Fund	2.5309	1.46095	2.2032	1.40177	3.5000	1.04881
Aventus India ESG Fund	2.7695	1.45893	2.5905	1.52492	3.6667	1.21106
Mirae Asset ESG Sector Leaders ETF	2.1852	1.32157	1.9714	1.26786	2.8333	1.47196
Aditya Birla Sun Life ESG fund	2.5267	1.43535	2.3111	1.47323	3.1667	1.47196
ICICI prudential ESG fund	2.3416	1.39161	2.1587	1.36618	3.3333	1.21106
Kotak ESG opportunities fund	2.2551	1.38794	2.1460	1.38840	2.8333	1.47196
Quant ESG equity fund	2.0494	1.25870	1.9016	1.24403	2.8333	1.47196
Invesco ESG equity fund	2.2675	1.38112	2.0730	1.35830	3.0000	1.26491
HSBC Global Equity Climate Change Fund of Fund	2.3498	1.41898	2.1016	1.32918	3.5000	1.04881
<b>Total Awareness on Sustainability-themed funds</b>	<b>48.0423</b>	<b>24.69423</b>	<b>43.8458</b>	<b>24.52713</b>	<b>64.5238</b>	<b>22.64935</b>

*Source: Primary data*

Table 5.41 presents the comparison of investors' ages and their familiarity with various sustainability-themed funds. The table clearly shows that investors over 60 have the highest awareness for all the sustainability-themed funds, with a mean score

ranging from 2.8333 to 3.6667 and a standard deviation ranging from 1.04881 to 1.47196. This is followed by younger investors with a mean score ranging from 2.0494 to 2.7695 and a standard deviation ranging from 1.25870 to 1.46095. Investors between 30 and 60 have the lowest awareness, with the mean score ranging from 1.9016 to 2.5905 and the standard deviation from 1.24403 to 1.52492. The trend is the same when it comes to total awareness. With a mean score of 64.5238, respondents over 60 years had the highest degree of awareness, followed by respondents under 30 years, with a mean score of 48.0423. The lowest degree of awareness is seen among respondents between the ages of 30 years and 60 years, with a mean score of 43.8458. The findings show that the respondents' knowledge of funds with a sustainability theme is low, with overall mean scores ranging from 43.8458 to 64.5238 and individual mean scores ranging from 1.9016 to 3.6667.

#### **5.4.5.2.3.1. Results of Kruskal-Wallis H Test of Age-wise Awareness on Sustainability-themed Funds**

A hypothesis was developed to examine the relationship between age and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different age groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different age groups.

To test this hypothesis, the non-parametric Kruskal-Wallis H test was used as the data was found to be non-normal. The results are presented in Table 5.42.

**Table 5.42**  
**Results of Kruskal-Wallis H Test of Age-wise Awareness on Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Age group)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Up to 30 years	298.61	8.734	0.013
	30-60 years	267.67		
	Above 60 years	408.58		

*Source: Primary data*

The results of the test show that the p-value, with a significance of 0.013, is less than 0.05. This means that the null hypothesis is rejected and there is a significant difference in the level of awareness of various sustainability-themed funds among investors of different age groups.

#### 5.4.5.2.4. General Awareness Related to Sustainability: Age-wise Comparison

A comparison is made between general awareness on sustainability among different age groups. The mean and standard deviation are included to demonstrate the extent of general awareness about sustainability among investors of different age groups.

**Table 5.43**  
**Mean and Standard Deviation Showing Age-wise General Awareness Related to Sustainability**

Variables	Age group					
	Up to 30 years		30-60 years		Above 60 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.5926	1.20032	2.6889	1.28131	3.1667	1.47196
Awareness on sustainability reporting of companies	2.5597	1.25948	2.6222	1.37313	4.0000	.63246
Noticing the companies that are doing sustainability reporting	2.4198	1.29714	2.4952	1.38318	2.6667	1.03280
Received information about sustainability rating agencies	2.243	1.2575	2.260	1.3315	2.667	1.6330
Received information about ESG (Environment, Social and Governance) scores of companies	2.2346	1.24587	2.1619	1.31472	2.6667	1.63299
Noticed the companies that constitute sustainability-themed indices	2.2469	1.28434	2.2508	1.35344	2.1667	1.16905
<b>General Awareness Related to Sustainability</b>	<b>47.6543</b>	<b>18.25574</b>	<b>48.2646</b>	<b>19.08062</b>	<b>57.7778</b>	<b>18.57916</b>

Source: Primary data

The mean and standard deviation of general awareness on sustainability are presented in Table 5.43. The majority of the individual variables related to sustainability and total general awareness on sustainability is slightly better for investors belonging to the above 60 years age category (with a mean score of 57.7778 and standard deviation of 18.57916), followed by the 30-60 years age category (with a mean score of 48.2646 and standard deviation of 19.08062). It is also clear from the table that the general awareness on sustainability is lowest among young investors belong to up to 30 years age category (with a mean score of 47.6543 and standard deviation of 18.25574). It has been discovered that older investors are better aware of general aspects related to sustainability. The overall data suggests a low degree of general awareness on sustainability across all age categories, with a mean score ranging from 47.6543 to 57.7778.

**5.4.5.2.4.1. Result of Kruskal-Wallis H Test of Age-wise General Awareness Related to Sustainability**

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and age.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different age groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different age groups.

The data was found to be non-normal; thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between age and general awareness related to sustainability. The results of the test are presented in Table 5.44.

**Table 5.44**  
**Result of Kruskal-Wallis H Test of Age-wise General Awareness Related to Sustainability**

<b>Dependent Variable</b>	<b>Independent variable (Age group)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
General Awareness Related to Sustainability	Up to 30 years	279.97	1.795	0.408
	30-60 years	282.78		
	Above 60 years	370.00		

*Source: Primary data*

The Kruskal-Wallis H test result showed a value of 1.795 and a p-value of 0.408 (Sig. value 0.408). As the p-value is greater than 0.05, it can be concluded that there is no significant difference in general awareness related to sustainability among the different age groups. The results of the Kruskal-Wallis H test indicate that age does not significantly impact an individual's general awareness related to sustainability.

#### 5.4.5.2.5. Overall Awareness and Dimensions: Age-wise Comparison

An age-wise comparison is made concerning different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.45 exhibits the different dimensions of SRI awareness and overall SRI awareness concerning the age of the respondents.

**Table 5.45**  
**Mean & Standard Deviation Showing Age-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Age group					
	Up to 30 years		30-60 years		Above 60 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on different aspects of socially responsible investment	51.5455	22.65985	47.9683	21.48053	64.0000	12.71220
Awareness on sustainability-themed indices	52.0302	25.26977	46.8148	24.98930	48.3333	22.97341
Awareness on sustainability-themed Funds	48.0423	24.69423	43.8458	24.52713	64.5238	22.64935
General awareness related to Sustainability	47.6543	18.25574	48.2646	19.08062	57.7778	18.57916
<b>Overall Awareness on Socially Responsible Investment</b>	<b>49.8403</b>	<b>17.89263</b>	<b>46.7234</b>	<b>16.89794</b>	<b>58.6587</b>	<b>12.00447</b>

Source: Primary data

The overall awareness on SRI and awareness on different dimensions of SRI concerning the investors' ages are evaluated using the mean and standard deviation and portrayed in Table 5.45. It was found that with a mean score of 58.6587, investors in the above 60 years age category had the highest overall awareness of SRI. The mean scores for the age groups of up to 30 years old and 30 to 60 years old were lower, at 49.8403 and 46.7234, respectively. This suggests that, when compared to younger investors, elderly investors have a higher level of overall awareness about SRI.

With respect to individual dimensions of SRI, the highest mean score is related to awareness of sustainability-themed funds, with the above 60 years age group having the highest mean score of 64.5238. The investors in the up to 30 years age category and the 30-60 years age category had lower mean scores of 48.0423 and 43.8458, respectively.

In summary, the data indicates that older investors are better aware of SRI than young investors. The data also shows that respondents' overall understanding of SRI is weak, with a mean score that ranges from 46.7234 to 58.6587.

#### **5.4.5.2.5.1. Result of Kruskal-Wallis H Test of Age-wise Comparison of Overall Awareness on SRI**

A hypothesis was formulated to examine whether there is any significant difference in the overall awareness on socially responsible investment among different age groups.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different age groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different age groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.46.



**Table 5.46**

**Result of Kruskal-Wallis H Test of Age-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Age groups)</b>	<b>N</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H test</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Up to 30 years	433	296.90	6.968	0.031
	30-60 years	117	268.45		
	Above 60 years	13	392.17		

*Source: Primary data*

The Kruskal-Wallis H test results show that the p-value is less than 0.05 (Sig value. 0.031) and thus, the null hypothesis is rejected. That is, there is a significant difference in the overall awareness on socially responsible investment among different age groups. The mean rank of the above 60 years group was the highest (392.17), indicating that they had the highest overall awareness on SRI, while the 30-60 years group had the lowest mean rank (268.45). This implies that the respondents' age significantly influences the overall awareness on socially responsible investment.

**5.4.5.3. The Relationship between Educational Qualifications and Awareness on Socially Responsible Investment**

An educational qualification-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

**5.4.5.3.1. Awareness on Different Aspects of Socially Responsible Investment: Educational Qualification-wise Comparison**

A comparison is made between awareness on different aspects of socially responsible investment across different educational qualifications. The mean and standard deviation of the awareness are presented in Table 5.47.

**Table 5.47**

**Mean & Standard Deviation Showing Educational Qualification-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Educational Qualification											
	Below SSLC		SSLC		Plus Two		Graduation		Post-Graduation		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	1.7500	1.48805	2.4571	1.52128	2.2807	1.39220	2.7290	1.41468	2.8614	1.47260	2.5926	1.36605
Ethical investment	2.6250	1.50594	3.2286	1.41600	3.0789	1.42757	3.0981	1.42897	3.2048	1.39052	3.0000	1.41421
Community investment	1.7500	1.48805	2.3714	1.41600	2.2895	1.26017	2.3738	1.34285	2.4337	1.27629	2.4815	1.47727
ESG investment	2.3750	1.30247	2.3714	1.37382	2.2982	1.36278	2.4907	1.45590	2.6205	1.40797	2.2593	1.45688
Sustainable investment	2.1250	1.35620	2.2571	1.35783	2.3158	1.36528	2.5681	1.44108	2.6386	1.44036	2.3704	1.52286

Mission-based investment	2.3750	1.59799	2.7429	1.55947	2.4912	1.42820	2.5654	1.44798	2.5542	1.45021	2.5556	1.45002
Impact investment	2.1250	1.64208	2.2286	1.43662	2.0965	1.30329	2.2383	1.36152	2.2349	1.32993	2.2963	1.35348
Islamic investment	3.0000	1.60357	2.2857	1.44653	2.6228	1.50156	2.3925	1.52757	2.5000	1.51257	2.8148	1.61810
Green bond	1.7500	1.16496	2.1429	1.24009	2.0351	1.23324	2.2103	1.33487	2.2651	1.33561	2.4444	1.55250
Green governance	1.7500	1.48805	2.3429	1.37076	2.0526	1.22541	2.2897	1.44059	2.3675	1.38517	2.3704	1.57256
<b>Total Awareness on different Aspects of Socially Responsible Investment</b>	<b>43.2500</b>	<b>22.90196</b>	<b>48.8571</b>	<b>23.33533</b>	<b>47.1228</b>	<b>20.14467</b>	<b>50.0188</b>	<b>22.68487</b>	<b>51.3614</b>	<b>21.82802</b>	<b>50.3704</b>	<b>24.07704</b>

Source: Primary data

Table 5.47 presents the degree of awareness on different aspects of socially responsible investment among investors from different educational groups. The individual mean score and standard deviation suggest limited awareness of various aspects of SRI among all educational groups. The individual mean scores range between 1.755 and 3.2286. With a mean score of 3.00 and a standard deviation of 1.60357, investors in the below SSLC group have the highest awareness of Islamic investing.

Ethical investing is the most well-known aspect among all educational groups except those below the SSLC category of investors. The total awareness on SRI is slightly higher for investors with post-graduate degrees with a mean score of 51.3614, followed by the others category of investors and investors with a graduate degree, with mean scores of 50.3704 and 50.0188, respectively. It is revealed from the analysis that the individual mean scores and overall mean scores on various aspects of SRI are limited across all investors, irrespective of their educational qualifications.

#### **5.4.5.3.1.1. Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Different Aspects of Socially Responsible Investment**

To identify whether there is any difference in awareness of different aspects of SRI and educational qualifications, a hypothesis was developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different educational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different educational groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.48.

**Table 5.48**

**Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Educational qualification)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Below SSLC	229.44	3.330	0.649
	SSLC	271.67		
	Plus Two	265.54		
	Graduation	283.69		
	Post-Graduation	295.57		
	Others	283.69		

*Source: Primary data*

It can be seen from Table 5.48 that the p-value (Sig. value 0.649) is greater than 0.05, so the null hypothesis is accepted. This implies that there is no significant difference in the level of awareness about various aspects of SRI among individuals of different educational qualifications.

**5.4.5.3.2. Awareness on Sustainability-themed Indices: Educational Qualification-wise Comparison**

Table 5.49 compares the level of awareness about various sustainability-themed indices among different educational groups. The mean and standard deviation are shown to provide an understanding of the level of awareness about sustainability-themed indices among investors of different educational groups.

**Table 5.49**

**Mean & Standard Deviation Showing Educational Qualification-wise Awareness on Sustainability-themed Indices**

Variable	Educational Qualification											
	Below SSLC		SSLC		Plus Two		Graduation		Post-Graduation		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	3.2500	1.98206	2.5143	1.50238	2.7544	1.50845	2.7150	1.47214	3.0422	1.48672	2.8148	1.46857
S&P BSE CARBONEX	2.5000	1.69031	2.1429	1.43779	2.0439	1.35274	2.1682	1.30356	2.5000	1.39153	2.5926	1.44806
S&P BSE GREENEX	2.2500	1.38873	2.1714	1.42428	2.0526	1.30921	2.0981	1.25773	2.4217	1.34948	2.7778	1.50214
NIFTY100 ESG Index	2.1250	1.55265	2.4857	1.54104	2.6316	1.39698	2.6262	1.46331	2.8373	1.49465	2.7778	1.42325
NIFTY 100 Enhanced ESG Index	2.0000	1.41421	2.3714	1.49678	2.3596	1.37697	2.4065	1.39353	2.6988	1.50744	2.7037	1.40917
MSCI ESG India Index	1.7500	1.03510	2.1429	1.43779	2.1404	1.26125	2.1449	1.28280	2.4398	1.41185	2.5926	1.30853
<b>Total Awareness on Sustainability-themed Indices</b>	<b>46.2500</b>	<b>27.16426</b>	<b>46.0952</b>	<b>27.64724</b>	<b>46.6082</b>	<b>23.65344</b>	<b>47.1963</b>	<b>24.33744</b>	<b>53.1325</b>	<b>25.93361</b>	<b>54.1975</b>	<b>27.88242</b>

Source: Primary data

Table 5.49 depicts the educational category-wise analysis of awareness on various sustainability-themed indices. With mean scores ranging from 1.75 to 3.25, investors in the below SSLC education category have the lowest awareness of all sustainability-themed indices. S&P BSE 100 ESG index has a slightly better mean score across all educational categories of investors. In the case of total awareness on sustainability-themed indices, investors belonging to the others category have slightly highest awareness with a mean score of 54.1975 and standard deviation of 27.88242, followed by investors having a postgraduate degree with a mean score of 53.1325 and standard deviation of 25.93361. It is also evident that the total awareness on sustainability-themed indices is lowest for investors with SSLC with a mean score of 46.0952 and standard deviation of 27.64724, followed by investors below SSLC qualification and Plus Two qualification. With an overall mean score ranging from 46.0952 to 54.1975, the analysis indicates that overall understanding of sustainability-themed indices is poor across all educational categories.

#### **5.4.5.3.2.1. Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Sustainability-themed Indices**

To test if there is any difference in awareness about sustainability-themed indices and educational qualifications, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different educational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different educational groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.50.

**Table 5.50**

**Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Sustainability-themed Indices**

<b>Dependent Variable</b>	<b>Independent variable (Educational qualification)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed indices	Below SSLC	259.44	7.521	0.185
	SSLC	255.36		
	Plus Two	270.79		
	Graduation	271.30		
	Post-Graduation	307.19		
	Others	310.98		

*Source: Primary data*

Table 5.50 depicts that the p-value (Sig value. 0.185) is greater than 0.05; thus, the null hypothesis is accepted. This means there is no significant difference in the level of awareness of various sustainability-themed indices among investors of different educational groups.

**5.4.5.3.3. Awareness on Sustainability-themed Funds: Educational Qualification-wise Comparison**

The comparison of the degree of awareness on various sustainability-themed funds across investors belonging to various educational qualification categories is displayed in Table 5.51. The mean and standard deviation values show how much investors know about these funds.



**Table 5.51**

**Mean & Standard Deviation Showing Educational Qualification-wise Awareness on Sustainability-themed Funds**

Variable	Educational Qualification											
	Below SSLC		SSLC		Plus Two		Graduation		Post-Graduation		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.0000	1.19523	2.0286	1.44478	2.1930	1.38818	2.2664	1.38031	2.6566	1.52042	2.4815	1.39698
Tata Ethical Fund	2.0000	1.19523	2.6571	1.64393	2.6053	1.51464	2.6402	1.48117	2.7771	1.51508	2.8889	1.36814
Nippon India Shariah BeEs	1.8750	1.24642	2.0857	1.40108	2.3509	1.52839	2.3505	1.40541	2.6325	1.52273	2.4074	1.24836
Axis ESG Equity Fund	1.7500	1.16496	1.8857	1.32335	2.0789	1.28397	2.2664	1.37007	2.4458	1.47917	2.2963	1.26536
Quantum India ESG Equity Fund	1.5000	1.06904	1.9143	1.31443	1.9474	1.21817	2.0280	1.27789	2.2651	1.38024	2.1481	1.23113
Taurus Ethical Fund	2.0000	1.19523	2.0286	1.44478	2.1930	1.38818	2.2664	1.38031	2.6566	1.52042	2.4815	1.39698
Avendus India ESG Fund	2.0000	1.19523	2.6571	1.64393	2.6053	1.51464	2.6402	1.48117	2.7831	1.51396	2.8889	1.36814

Mirae Asset ESG Sector Leaders ETF	1.5000	1.06904	1.9143	1.31443	1.9474	1.21817	2.0280	1.27789	2.2651	1.38024	2.1481	1.23113
Aditya Birla Sun Life ESG fund	1.8750	1.24642	2.0857	1.40108	2.3509	1.52839	2.3505	1.40541	2.6325	1.52273	2.4074	1.24836
ICICI prudential ESG fund	1.7500	1.16496	1.8857	1.32335	2.0789	1.28397	2.2664	1.37007	2.4398	1.47894	2.2963	1.26536
Kotak ESG opportunities fund	1.5000	1.06904	2.4000	1.57555	1.9825	1.34350	2.1355	1.36191	2.3855	1.42558	2.4444	1.25064
Quant ESG equity fund	1.5000	1.06904	1.8286	1.31699	1.8158	1.20152	1.9065	1.19099	2.2048	1.35521	2.1111	1.18754
Invesco ESG equity fund	1.8750	1.12599	2.0571	1.43369	2.0175	1.31689	2.1308	1.36064	2.3434	1.42580	2.2222	1.31071
HSBC Global Equity Climate Change Fund of Fund	1.8750	1.45774	1.8857	1.30094	2.0000	1.26211	2.1776	1.34138	2.5301	1.47986	2.1852	1.27210
<b>Total Awareness on Sustainability-themed Funds</b>	<b>35.7143</b>	<b>21.00951</b>	<b>41.8776</b>	<b>25.21640</b>	<b>43.0952</b>	<b>23.84172</b>	<b>44.9332</b>	<b>23.82810</b>	<b>50.0258</b>	<b>26.36947</b>	<b>47.7249</b>	<b>22.82023</b>

Source: Primary data

Table 5.51 narrates the level of awareness of sustainability-themed funds among investors from different educational groups. For most sustainability-themed funds, investors with below SSLC qualification have the lowest degree of awareness. In contrast, those with post-graduate qualifications have the highest degree of awareness. It is evident from the table that the level of awareness of sustainability-themed funds slightly increases with educational qualification. Individual awareness and overall awareness are comparatively low across all funds, irrespective of educational qualification. The Tata Ethical Fund and Avendus India ESG Fund have a slightly higher awareness rate than others. Notably, investors with a post-graduate degree have the highest level of knowledge for all funds except for Tata Ethical Fund, Avendus India ESG Fund, and Kotak ESG Opportunities Fund. Overall, the table suggests that, across all educational categories, awareness of funds with a sustainability theme is relatively low, with mean scores ranging from 35.7143 to 50.0258.

#### **5.4.5.3.3.1. Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Sustainability-themed Funds**

A hypothesis was developed to examine the relationship between educational qualification and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different educational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different educational groups.

The non-parametric Kruskal-Wallis H test was used to test this hypothesis as the data was found to be non-normal. The results are presented in Table 5.52.

**Table 5.52**

**Results of Kruskal-Wallis H Test of Educational Qualification-wise Awareness on Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Educational qualification)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Below SSLC	225.31	7.868	0.164
	SSLC	249.83		
	Plus Two	265.97		
	Graduation	277.85		
	Post-Graduation	306.94		
	Others	298.20		

*Source: Primary data*

The results of the test show that the p-value, with a significance of 0.164, is greater than 0.05. This means that the null hypothesis is accepted and that there is no significant difference in the level of awareness of various sustainability-themed funds among investors of different educational groups.

**5.4.5.3.4. General Awareness Related to Sustainability: Educational Qualification-wise Comparison**

Table 5.53 compares the general awareness level on sustainability to various levels of education. The mean and standard deviation indicate how well investors from various educational backgrounds are generally informed about sustainability.

**Table 5.53**

**Mean and Standard Deviation Showing Educational Qualification-wise General Awareness Related to Sustainability**

Variables	Educational Qualification											
	Below SSLC		SSLC		Plus Two		Graduation		Post-Graduation		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.7500	1.75255	2.6571	1.28207	2.5789	1.21855	2.6589	1.24112	2.6566	1.27310	2.8519	1.16697
Awareness on sustainability reporting of companies	3.0000	1.51186	2.9143	1.33662	2.4737	1.24950	2.5421	1.34814	2.7048	1.34960	2.6296	1.24493
Noticing the companies that are doing sustainability reporting	3.0000	1.51186	2.6286	1.47699	2.2632	1.23412	2.4813	1.39991	2.4940	1.32000	2.6296	1.21365

Received information about sustainability rating agencies	2.625	1.5980	2.029	1.2945	2.132	1.2011	2.290	1.3567	2.295	1.2899	2.481	1.2821
Received information about ESG (Environment, Social and Governance) scores of companies	3.0000	1.77281	2.0000	1.23669	2.0439	1.23654	2.2477	1.29258	2.1807	1.29937	2.5926	1.21716
Noticed the companies that constitute sustainability-themed indices	2.2500	1.75255	2.0286	1.24819	2.4298	1.34999	2.2430	1.28071	2.1747	1.33015	2.2593	1.43024
<b>General Awareness Related to Sustainability</b>	<b>55.4167</b>	<b>24.74874</b>	<b>47.5238</b>	<b>19.44227</b>	<b>46.4035</b>	<b>17.41474</b>	<b>48.2087</b>	<b>19.01486</b>	<b>48.3534</b>	<b>19.01885</b>	<b>51.4815</b>	<b>17.67062</b>

*Source: Primary data*

It can be observed from Table 5.53 that investors having below SSLC qualification possess the highest general awareness on sustainability compared to other educational groups, with a mean value of 55.4167 and a standard deviation of 24.74874. Investors who have graduation as their highest qualification have the lowest general awareness, with a mean score of 46.4035 and a standard deviation of 17.41474. In terms of specific aspects, the table indicates that the awareness level on general aspects of sustainability is comparatively low for all investors, irrespective of the educational background of the investors, with the mean score ranging from 2 to 3. The total awareness is also relatively low among all educational groups.

#### 5.4.5.3.4.1. Result of Kruskal-Wallis H Test of Educational Qualification-wise General Awareness Related to Sustainability

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and educational qualifications.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different educational groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different educational groups.

The data was found to be non-normal thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between educational qualification and general awareness related to sustainability. The results of the test are presented in Table 5.54.

**Table 5.54**  
**Result of Kruskal-Wallis H Test of Educational Qualification-wise General Awareness Related to Sustainability**

<b>Dependent Variable</b>	<b>Independent variable (Educational qualification)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
General Awareness Related to Sustainability	Below SSLC	331.38	2.371	0.796
	SSLC	275.60		
	Plus Two	270.92		
	Graduation	283.01		
	Post-Graduation	283.81		
	Others	313.74		

*Source: Primary data*

The Kruskal-Wallis H test result showed a value of 2.371 and a p-value of 0.796 (Sig. value 0.796). As the p-value is greater than 0.05, it can be concluded that there is no significant difference in general awareness related to sustainability among the different educational groups. The results of the Kruskal-Wallis H test indicate that educational qualification does not significantly impact an individual's general awareness related to sustainability.

#### **5.4.5.3.5. Overall Awareness and Dimensions: Educational Qualification-wise Comparison**

An educational qualification-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.55 exhibits the different dimensions of SRI awareness and overall SRI awareness with respect to educational qualifications.



**Table 5.55**

**Mean & Standard Deviation Showing Educational Qualification-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Educational Qualification											
	Below SSLC		SSLC		Plus Two		Graduation		Post-Graduation		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on Different Aspects of Socially Responsible Investment	43.2500	22.90196	48.8571	23.33533	47.1228	20.14467	50.0188	22.68487	51.3614	21.82802	50.3704	24.07704
Awareness on sustainability-themed Indices	46.2500	27.16426	46.0952	27.64724	46.6082	23.65344	47.1963	24.33744	53.1325	25.93361	54.1975	27.88242
Awareness on sustainability-themed funds	35.7143	21.00951	41.8776	25.21640	43.0952	23.84172	44.9332	23.82810	50.0258	26.36947	47.7249	22.82023
General awareness related to Sustainability	55.4167	24.74874	47.5238	19.44227	46.4035	17.41474	48.2087	19.01486	48.3534	19.01885	51.4815	17.67062
<b>Overall Awareness on Socially Responsible Investment</b>	<b>45.1577</b>	<b>14.22996</b>	<b>46.0884</b>	<b>19.46162</b>	<b>45.8074</b>	<b>15.36179</b>	<b>47.6059</b>	<b>17.31285</b>	<b>50.7183</b>	<b>18.19560</b>	<b>50.9436</b>	<b>17.74030</b>

Source: Primary data

Table 5.55 illustrates the overall awareness and awareness on different dimensions of socially responsible investment among investors with different educational qualifications. It is important to note that investors with good educational qualifications have the highest level of overall awareness on SRI. That is, investors belong to the others category, and investors with post-graduate education have the highest overall awareness level with a mean score of 50.9436 and 50.7183, respectively. The others category includes investors holding PhD degrees, CA and diplomas. Investors with below SSLC qualification have the lowest overall awareness level, with a mean value of 45.1577 and a standard deviation of 14.22996.

In most cases, overall awareness and awareness on specific aspects of SRI, as the education level rises, awareness also slightly rises. The table also reveals that awareness on sustainability-themed funds is comparatively low across all educational groups. The table also shows that investors with various levels of education have varying levels of understanding of general aspects of sustainability and overall SRI. Overall, the table demonstrates that the total awareness on SRI is low among all educational groups, with mean scores ranging from 45.1577 to 50.9436.

#### **5.4.5.3.5.1. Result of Kruskal-Wallis H Test of Educational Qualification-wise Comparison of Overall Awareness on SRI**

A hypothesis is formulated to examine whether there is any significant difference in the overall awareness of socially responsible investment among different educational qualifications.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different educational groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different educational groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.56.

**Table 5.56**

**Result of Kruskal-Wallis H Test of Educational Qualification-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Educational qualification)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Below SSLC	261.13	6.704	0.244
	SSLC	255.69		
	Plus Two	262.97		
	Graduation	276.51		
	Post-Graduation	304.29		
	Others	308.87		

*Source: Primary data*

The Kruskal-Wallis H test results show that the p-value is greater than 0.05 (Sig value. 0.244), and thus the null hypothesis is accepted. That is, there is no significant difference in the overall awareness on socially responsible investment among different educational groups.

Overall, the study suggests no significant relation exists between educational qualification and the level of awareness of socially responsible investment (SRI) among investors. The Kruskal-Wallis H test did not reveal any statistically significant difference in the level of awareness of various aspects of SRI among investors of different educational groups. Therefore, the findings suggest that the level of awareness of SRI is not dependent on educational qualification. Furthermore, the results indicate that the overall awareness on SRI is limited among investors, regardless of their education.

**5.4.5.4. The Relationship between Occupation and Awareness on Socially Responsible Investment**

An occupation-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

#### 5.4.5.4.1. Awareness on Different Aspects of Socially Responsible Investment: Occupation-wise Comparison

Table 5.57 compares the levels of awareness among investors from various occupations on different aspects of socially responsible investing. The mean and standard deviation provided in the table highlight the degree of awareness.

**Table 5.57**

**Mean & Standard Deviation Showing Occupation-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Occupation											
	Business		Profession		Government Employee		Private Employee		Retired		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.7368	1.52638	2.6202	1.47476	2.3619	1.25670	2.6905	1.46878	3.6250	1.18773	2.8056	1.52727
Ethical investment	3.0789	1.44003	3.1860	1.45112	3.0952	1.31941	3.0429	1.44867	4.1250	.64087	3.3056	1.36945
Community investment	2.4474	1.41793	2.3178	1.24364	2.3143	1.21144	2.3524	1.37983	3.7500	.88641	2.3611	1.26836

ESG investment	2.5658	1.49965	2.4574	1.39759	2.4190	1.34294	2.4429	1.42065	3.3750	1.06066	2.4167	1.55609
Sustainable investment	2.5658	1.50851	2.4419	1.40260	2.5619	1.35110	2.4785	1.44806	3.0000	.92582	2.4444	1.53891
Mission-based investment	2.8158	1.47613	2.5349	1.39220	2.4667	1.44160	2.5095	1.50037	3.2500	.88641	2.4444	1.38243
Impact investment	2.3553	1.43019	2.0698	1.25739	2.0762	1.26867	2.2429	1.36710	3.8750	.99103	2.2222	1.39614
Islamic investment	2.5000	1.48324	2.5736	1.54503	2.3048	1.42858	2.4286	1.52715	3.5000	1.60357	2.8889	1.59960
Green bond	2.3947	1.34738	2.1783	1.31369	1.9714	1.19661	2.1286	1.32248	3.5000	1.06904	2.5278	1.42400
Green governance	2.3947	1.38640	2.1783	1.31369	2.1619	1.38066	2.2238	1.41503	3.2500	1.16496	2.6111	1.45951
<b>Awareness on Different Aspects of Socially Responsible Investment</b>	<b>51.7105</b>	<b>23.94818</b>	<b>49.1163</b>	<b>20.78748</b>	<b>47.4667</b>	<b>19.66893</b>	<b>49.1866</b>	<b>23.04612</b>	<b>70.5000</b>	<b>11.19949</b>	<b>52.0556</b>	<b>22.63492</b>

Source: Primary data

Table 5.57 shows the level of awareness among investors of various occupations towards multiple aspects of socially responsible investment (SRI), including ethical investment, community investment, environmental, social, and governance (ESG) investment, sustainable investment and other SRI-related concepts. Business, profession, government employee, private employee, retired, and others are among the categories of occupations. The others category includes students, researchers and homemakers. Government employees have the lowest level of awareness regarding SRI, community investment, Islamic investment, green bonds, and green governance. In contrast, retired individuals have the highest mean awareness scores for all SRI components. Ethical investing has the highest mean score across all occupational groups, with a mean score ranging from 3.0429 to 4.1250. This suggests that all investors, regardless of occupation, are aware of ethical investment. The table displays that retired investors, who have a mean score of 70.5 and a standard deviation of 11.19949, have the highest overall awareness of various aspects of socially responsible investment. In contrast, across all occupational groupings, government employees have the lowest mean awareness level (mean score of 47.4667) on different aspects of SRI. The mean value observations indicate that there is only a moderate awareness of various aspects of SRI among different occupational categories.

#### **5.4.5.4.1.1. Results of Kruskal-Wallis H Test of Occupation-wise Awareness on Different Aspects of Socially Responsible Investment**

To identify whether there is any difference in awareness of different aspects of SRI and occupation of the investors, a hypothesis is developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different occupational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different occupational groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.58.

**Table 5.58**  
**Results of Kruskal-Wallis H Test of Occupation-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Occupation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Business	292.51	9.65	0.086
	Profession	281.21		
	Government Employee	270.53		
	Private Employee	275.16		
	Retired	444.69		
	Others	299.65		

*Source: Primary data*

It is clear from Table 5.58 that the p-value (Sig. value .086) is greater than 0.05, so the null hypothesis is accepted. This implies no significant difference in the level of awareness about various aspects of SRI among investors of different occupational groups.

#### **5.4.5.4.2. Awareness on Sustainability-themed Indices: Occupation-wise Comparison**

The degree of awareness on various sustainability-themed indices across investors with different occupations is made and presented in Table 5.59.

**Table 5.59**

**Mean & Standard Deviation Showing Occupation-wise Awareness on Sustainability-themed Indices**

Variables	Occupation											
	Business		Profession		Government Employee		Private Employee		Retired		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	2.8947	1.51066	2.8217	1.51270	2.6571	1.40623	2.8476	1.52039	3.8750	.99103	2.7222	1.57863
S&P BSE CARBONEX	2.4474	1.42730	2.2946	1.39979	2.0476	1.21197	2.2524	1.36537	2.7500	1.48805	2.3611	1.53349
S&P BSE GREENEX	2.4079	1.39693	2.2403	1.35078	2.0571	1.19155	2.1905	1.31677	2.7500	1.48805	2.3333	1.51186
NIFTY100 ESG Index	2.9342	1.47273	2.5349	1.46866	2.5143	1.39446	2.6810	1.45033	3.6250	1.06066	2.9444	1.65520
NIFTY 100 Enhanced ESG Index	2.6447	1.43948	2.3876	1.43238	2.3810	1.39629	2.4810	1.41831	3.1250	1.24642	2.7500	1.66261
MSCI ESG India Index	2.3816	1.33633	2.2558	1.33627	2.0762	1.22235	2.2190	1.33040	3.0000	1.41421	2.4167	1.55609
<b>Total Awareness on Sustainability-themed Indices</b>	<b>52.3684</b>	<b>26.10983</b>	<b>48.4496</b>	<b>25.3484</b>	<b>45.7778</b>	<b>22.72215</b>	<b>48.9048</b>	<b>25.24977</b>	<b>63.7500</b>	<b>20.50455</b>	<b>51.7593</b>	<b>29.14099</b>

Source: Primary data



Table 5.59 exhibits the extent of awareness on different sustainability-themed indices by the investors, grouped into six based on their occupation. Six sustainability-related indexes are included in Table: S&P BSE 100 ESG Index, S&P BSE CARBONEX, S&P BSE GREENEX, NIFTY100 ESG Index, NIFTY 100 Enhanced ESG Index, and MSCI ESG India Index. For all the sustainability-themed indices, it is clear from the table that retired investors have the highest mean awareness scores, while government employees have the lowest. The table also shows that, regarding total awareness, retired investors rank first with a mean score of 63.7500 and a standard deviation of 20.50455, followed by business people with a mean score of 52.3684 and a standard deviation of 26.10983. Government employees had a mean score of 45.7778 and a standard deviation of 22.72215, the lowest mean value of overall awareness on sustainability-themed indices. The average scores across all occupational groups indicate a low rate of awareness of various sustainability-themed indices by the investors.

#### **5.4.5.4.2.1. Results of Kruskal-Wallis H Test of Occupation-wise Awareness on Sustainability-themed Indices**

To test if there is any difference in awareness about sustainability-themed indices across different occupational groups of the respondents, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different occupational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different occupational groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.60.

**Table 5.60**

**Results of Kruskal-Wallis H Test of Occupation-wise Awareness on Sustainability-themed Indices**

<b>Dependent Variable</b>	<b>Independent variable (Occupation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Indices	Business	304.09	6.369	0.272
	Profession	278.48		
	Government Employee	263.44		
	Private Employee	281.14		
	Retired	386.50		
	Others	291.76		

*Source: Primary data*

Table 5.60 depicts that the p-value (Sig value. 0.272) is greater than 0.05; thus, the null hypothesis is accepted. This means there is no significant difference in the level of awareness of various sustainability-themed indices among investors of different occupational groups.

**5.4.5.4.3. Awareness on Sustainability-themed Funds Occupation-wise Comparison**

Table 5.61 presents the level of awareness about various sustainability-themed funds among investors with diverse occupations.

**Table 5.61**

**Mean & Standard Deviation Showing Occupation-wise Awareness on Sustainability-themed Funds**

Variables	Occupation											
	Business		Profession		Government Employee		Private Employee		Retired		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.4737	1.48300	2.4186	1.44535	2.0857	1.37361	2.3571	1.41795	3.7500	.70711	2.3889	1.55431
Tata Ethical Fund	2.6579	1.53669	2.8295	1.56686	2.5238	1.50061	2.6238	1.44646	3.8750	.83452	2.6667	1.49284
Nippon India Shariah BeEs	2.3816	1.42330	2.6047	1.53307	2.2857	1.46573	2.3619	1.41505	3.5000	1.19523	2.2222	1.49497
Axis ESG Equity Fund	2.3026	1.38583	2.3411	1.45504	2.0095	1.26715	2.2238	1.35279	3.6250	.91613	2.3889	1.51710
Quantum India ESG Equity Fund	2.1053	1.30209	2.1550	1.34309	1.8476	1.18306	2.0524	1.28000	3.3750	1.40789	2.1944	1.39016
Taurus Ethical Fund	2.4737	1.48300	2.4186	1.44535	2.0857	1.37361	2.3571	1.41795	3.7500	.70711	2.3889	1.55431
Aventus India ESG Fund	2.6579	1.53669	2.8295	1.56686	2.5333	1.50043	2.6238	1.44646	3.8750	.83452	2.6667	1.49284

Mirae Asset ESG Sector Leaders ETF	2.1053	1.30209	2.1550	1.34309	1.8476	1.18306	2.0524	1.28000	3.3750	1.40789	2.1944	1.39016
Aditya Birla Sun Life ESG fund	2.3816	1.42330	2.6047	1.53307	2.2857	1.46573	2.3619	1.41505	3.5000	1.19523	2.2222	1.49497
ICICI prudential ESG fund	2.3026	1.38583	2.3411	1.45504	2.0000	1.26339	2.2238	1.35279	3.6250	.91613	2.3889	1.51710
Kotak ESG opportunities fund	2.2237	1.41985	2.4031	1.46052	2.0476	1.30370	2.1000	1.35354	3.2500	1.28174	2.2222	1.43649
Quant ESG equity fund	2.0658	1.25789	2.1163	1.34413	1.6667	1.02532	1.9476	1.24973	3.2500	1.28174	2.0556	1.35107
Invesco ESG equity fund	2.2105	1.34972	2.2636	1.38361	2.0952	1.43127	2.0667	1.32164	3.3750	1.06066	2.2500	1.46141
HSBC Global Equity Climate Change Fund of Fund	2.3553	1.36337	2.3256	1.43158	1.9619	1.30032	2.1714	1.33023	3.7500	.70711	2.3056	1.56423
<b>Total Awareness on Sustainability-themed funds</b>	<b>46.7105</b>	<b>24.58474</b>	<b>48.2946</b>	<b>25.98204</b>	<b>41.8231</b>	<b>22.98342</b>	<b>45.0340</b>	<b>24.16547</b>	<b>71.2500</b>	<b>17.71885</b>	<b>46.5079</b>	<b>26.61341</b>

Source: Primary data

Table 5.61 highlights the mean and standard deviation of awareness about funds with a sustainability theme among various occupational groups of investors. Government employees are the least knowledgeable about the majority of sustainability-themed funds, while retired investors are the most knowledgeable. Retired investors had the highest overall awareness of sustainability-themed funds, with a mean score of 71.2500 and a standard deviation of 17.71885. Professionals and business people have the next-highest average scores, at 48.2946 and 46.7105, respectively. Overall data suggests that the individual and total mean scores on sustainability-themed funds show that only retired investors are aware of these funds, and other investors from other occupational groups are less aware of these funds.

#### **5.4.5.4.3.1. Results of Kruskal-Wallis H Test of Occupation-wise Awareness on Sustainability-themed Funds**

A hypothesis was developed to examine the relationship between the occupation of the investors and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different occupational groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different occupational groups.

The non-parametric Kruskal-Wallis H test was used to test this hypothesis as the data was found to be non-normal. The results are presented in Table 5.62.

**Table 5.62**  
**Results of Kruskal-Wallis H Test of Occupation-wise Awareness on**  
**Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Occupation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Business	287.86	12.149	0.03
	Profession	297.17		
	Government Employee	256.90		
	Private Employee	277.96		
	Retired	445.88		
	Others	283.46		

*Source: Primary data*

Table 5.62 demonstrates that the p-value, with a significance of 0.03, is less than 0.05. This indicates that the null hypothesis is rejected and that there is a significant difference in the level of awareness of various sustainability-themed funds among investors of different occupational groups. Retired investors have higher mean ranks than other occupational groups. This suggests that, relative to other occupational categories, retirees are more aware of sustainability-themed funds than other investors.

#### **5.4.5.4.4. General Awareness Related to Sustainability: Occupation-wise Comparison**

The general understanding of sustainability is examined among various occupational groups. The mean and standard deviation are included to demonstrate the extent of general awareness about sustainability among investors of various occupational groups.

**Table 5.63**

**Mean and Standard Deviation Showing Occupation-wise General Awareness Related to Sustainability**

Variables	Occupation											
	Business		Profession		Government Employee		Private Employee		Retired		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.9474	1.30532	2.7442	1.25797	2.4190	1.15842	2.5381	1.22219	3.5000	1.41421	2.8611	1.29069
Awareness on sustainability reporting of companies	2.9474	1.32559	2.5891	1.37280	2.5048	1.35961	2.5333	1.27220	3.6250	1.18773	2.5000	1.27615
Noticing the companies that are doing sustainability reporting	2.8289	1.38937	2.5039	1.35856	2.2571	1.29369	2.4238	1.33643	2.6250	1.30247	2.3611	1.29069

Received information about sustainability rating agencies	2.342	1.3909	2.318	1.3228	2.114	1.2582	2.257	1.2757	2.625	1.6850	2.194	1.2608
Received information about ESG (Environment, Social and Governance) scores of companies	2.5132	1.44677	2.1938	1.29348	2.0381	1.20833	2.1286	1.22870	2.5000	1.69031	2.3611	1.33423
Noticed the companies that constitute sustainability-themed indices	2.4474	1.41793	2.1395	1.26704	2.2476	1.34294	2.2810	1.32048	1.6250	.74402	2.1667	1.32017
<b>General Awareness Related to Sustainability</b>	<b>53.4211</b>	<b>20.11798</b>	<b>48.2946</b>	<b>19.75157</b>	<b>45.2698</b>	<b>17.63702</b>	<b>47.2063</b>	<b>18.02074</b>	<b>55.0000</b>	<b>17.99471</b>	<b>48.1481</b>	<b>17.71815</b>

Source: Primary data



Table 5.63 reports the mean and standard deviation of the general awareness of sustainability across various categories of occupations. The means and standard deviations in the table indicate that retired investors have the highest mean values for noticing CSR initiatives of invested companies, awareness of sustainability reporting of companies, and general awareness related to sustainability. At the same time, business people have the highest mean values for noticing the companies doing sustainability reporting, receiving information about companies' ESG scores, and noticing the companies that are included in the sustainability-themed indices. On the other hand, when it comes to the majority of the individual variables of general awareness on sustainability, government employees have the lowest mean values. The table also reveals that retired investors have the highest mean score for general sustainability awareness with a mean value of 55.00, followed by business people with a mean value of 53.4211, and investors who are government employees have the lowest mean score of 45.2698. Overall findings point out that investors are less aware of the general elements of sustainability regardless of their occupation, with mean values of individual variables and general awareness on sustainability ranging from 1.6250 to 3.6250 and 45.2698 to 55.000, respectively.

#### **5.4.5.4.4.1. Result of Kruskal-Wallis H Test of Occupation-wise General Awareness Related to Sustainability**

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and the occupation of the investors.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different occupational groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different occupational groups.

The data is found to be non-normal thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between occupation and general awareness related to sustainability. The results of the test are presented in Table 5.64.

**Table 5.64**  
**Result of Kruskal-Wallis H Test of Occupation-wise General Awareness Related to Sustainability**

Dependent Variable	Independent variable (Occupation)	Mean Rank	Kruskal-Wallis H	P value
General Awareness Related to Sustainability	Business	326.07	9.171	0.102
	Profession	279.72		
	Government Employee	259.13		
	Private Employee	276.92		
	Retired	346.63		
	Others	286.93		

*Source: Primary data*

It is clear from Table 5.64 that the null hypothesis is accepted since the p-value (Sig. value 0.102) is greater than 0.05. This implies no significant difference in general awareness related to sustainability among the different occupational groups of investors. The results of the Kruskal-Wallis H test show that occupation does not significantly affect investors' general awareness of sustainability.

#### **5.4.5.4.5. Overall Awareness and Dimensions: Occupation-wise Comparison**

An occupation-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.65 exhibits the different dimensions of SRI awareness and overall SRI awareness concerning the occupation of investors.

**Table 5.65**

**Mean & Standard Deviation Showing Occupation-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Occupation											
	Business		Profession		Government Employee		Private Employee		Retired		Others	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on Different Aspects of Socially Responsible Investment	51.7105	23.94818	49.1163	20.78748	47.4667	19.66893	49.1866	23.04612	70.5000	11.19949	52.0556	22.63492
Awareness on sustainability-themed Indices	52.3684	26.10983	48.4496	25.34843	45.7778	22.72215	48.9048	25.24977	63.7500	20.50455	51.7593	29.14099
Awareness on sustainability-themed funds	46.7105	24.58474	48.2946	25.98204	41.8231	22.98342	45.0340	24.16547	71.2500	17.71885	46.5079	26.61341
General awareness related to Sustainability	53.4211	20.11798	48.2946	19.75157	45.2698	17.63702	47.2063	18.02074	55.0000	17.99471	48.1481	17.71815
<b>Overall Awareness on Socially Responsible Investment</b>	<b>51.0526</b>	<b>17.35311</b>	<b>48.5388</b>	<b>17.62231</b>	<b>45.0844</b>	<b>15.27501</b>	<b>47.6008</b>	<b>17.70439</b>	<b>65.1250</b>	<b>12.13665</b>	<b>49.6177</b>	<b>18.98117</b>

*Source: Primary data*

The awareness on individual dimensions of socially responsible investment and overall awareness on SRI is presented in Table 5.65. Across all occupations, retirees have the highest mean awareness on various SRI aspects with a mean value of 70.5, awareness on various sustainability-themed indices with a mean value of 63.75, awareness on sustainability-themed funds with a mean value of 71.25, awareness on general sustainability with a mean value of 55.0; and the highest mean awareness on overall dimensions of SRI with a mean value of 65.1250.

This indicates that the retired investors have increased knowledge about various aspects of SRI and general awareness. Government employees, on the other hand, have the lowest mean awareness across all variables and individual variables. The data also shows that all occupational groups have a relatively low general awareness of sustainability. Overall, the data shows that, across all occupational groups, SRI awareness is relatively low, with mean scores ranging from 45.0844 to 65.1250.

#### **5.4.5.4.5.1. Result of Kruskal-Wallis H Test of Occupation-wise Comparison of Overall Awareness on SRI**

A hypothesis is formulated to examine whether there is any significant difference in the overall awareness on socially responsible investment among different occupational groups of investors.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different occupational groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different occupational groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.66.

**Table 5.66**

**Result of Kruskal-Wallis H Test of Occupation-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Occupation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Business	309.20	13.008	0.02
	Profession	284.90		
	Government Employee	256.38		
	Private Employee	275.58		
	Retired	442.75		
	Others	290.50		

*Source: Primary data*

It is evident from Table 5.66 that the value of Kruskal-Wallis H is 13.008. The null hypothesis is rejected because the calculated value of p is less than 0.05. That is, there is a significant difference in the overall awareness on socially responsible investment among different occupational groups. The mean ranks show that retired investors have a higher overall awareness of SRI than other investors.

**5.4.5.5. The Relationship between Marital Status and Awareness on Socially Responsible Investment**

A Marital status-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

**5.4.5.5.1. Awareness on Different Aspects of Socially Responsible Investment: Marital Status Comparison**

A comparison is made between awareness on different aspects of socially responsible investment across different marital status groups. The mean and standard deviation of the awareness are presented in Table 5.67.

**Table 5.67**

**Mean & Standard Deviation Showing Marital Status-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Marital Status							
	Single		Married		Widowed		Separated	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.6340	1.37900	2.6544	1.47694	2.8000	1.68655	1.8571	1.46385
Ethical investment	3.1134	1.37239	3.1445	1.42585	3.1000	1.44914	2.2857	1.88982
Community investment	2.3454	1.25062	2.3824	1.34351	2.7000	1.63639	2.0000	1.52753
ESG investment	2.4330	1.39509	2.4958	1.42047	2.7000	1.70294	1.8571	1.46385
Sustainable investment	2.5130	1.41829	2.5184	1.43032	2.2000	1.39841	1.8571	1.46385
Mission-based investment	2.5567	1.46792	2.5666	1.45059	2.3000	1.15950	2.2857	1.38013
Impact investment	2.1856	1.32203	2.2238	1.34768	2.3000	1.56702	2.0000	1.73205
Islamic investment	2.4381	1.44638	2.5354	1.56289	2.3000	1.41814	2.1429	1.46385
Green bond	2.2113	1.29634	2.1870	1.33534	2.6000	1.26491	1.2857	.75593
Green governance	2.2784	1.38641	2.2691	1.38932	2.4000	1.42984	1.4286	1.13389
<b>Total Awareness on Different Aspects of Socially Responsible Investment</b>	<b>49.5337</b>	<b>22.03241</b>	<b>49.9547</b>	<b>22.03299</b>	<b>50.8000</b>	<b>21.68871</b>	<b>38.0000</b>	<b>22.80351</b>

Source: Primary data

In other words, widowed investors have slightly higher mean scores than other investors for the concepts including socially responsible investment, community investment, ESG investment, impact investment, green bond and green governance. However, the mean awareness score for separated individuals is lower than for other marital status categories for all the aspects of SRI and total awareness on different aspects of SRI.

Moreover, the mean scores of awareness on different aspects of socially responsible investment are higher for ethical investment across all marital status groups with the mean score ranging from 2.2857 to 3.1445. Finally, the table shows the total awareness score on different aspects of socially responsible investment, which ranges from 38.0000 for separated individuals to 50.8000 for widowed individuals. Overall, the results suggest that there is a comparatively low level of awareness of socially responsible investment-related concepts across all marital status groups.

#### **5.4.5.5.1.1. Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Different Aspects of Socially Responsible Investment**

To determine whether there is any difference in awareness on different aspects of SRI and Marital status, a hypothesis is developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different marital status groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different marital status groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.68.

**Table 5.68**

**Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Marital Status)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Single	280.61	2.558	0.465
	Married	284.28		
	Widowed	295.15		
	Separated	186.64		

*Source: Primary data*

Table 5.68 reveals no significant difference in the mean scores of the awareness on different aspects of SRI across investors of different marital status categories. The p-value (Sig. value 0.465) is greater than 0.05, so the null hypothesis is accepted. This implies that there is no significant difference in the level of awareness about various aspects of SRI among individuals of different marital status groups

**5.4.5.5.2. Awareness on Sustainability-themed Indices: Marital Status-wise Comparison**

Table 5.69 compares the degree of awareness about sustainability indices among different marital status groups. The mean and standard deviation are shown to provide an understanding of the level of awareness about sustainability-themed indices among investors of different marital status categories.



**Table 5.69**

**Mean & Standard Deviation showing Marital Status-wise Awareness on Sustainability-themed Indices**

Variables	Marital Status							
	Single		Married		Widowed		Separated	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	2.7474	1.44075	2.8442	1.52669	3.7000	1.15950	2.2857	1.60357
S&P BSE CARBONEX	2.2423	1.32261	2.2918	1.39494	2.1000	1.44914	1.7143	1.25357
S&P BSE GREENEX	2.1701	1.28641	2.2691	1.35411	2.0000	1.33333	1.7143	1.25357
NIFTY100 ESG Index	2.7887	1.45455	2.6431	1.46651	2.3000	1.49443	2.1429	1.46385
NIFTY 100 Enhanced ESG Index	2.5928	1.46608	2.4533	1.41770	2.3000	1.49443	1.7143	1.25357
MSCI ESG India Index	2.3093	1.34943	2.2238	1.32215	2.2000	1.39841	1.7143	1.25357
<b>Total Awareness on Sustainability-themed Indices</b>	<b>49.5017</b>	<b>24.67598</b>	<b>49.0840</b>	<b>25.53490</b>	<b>48.6667</b>	<b>24.25177</b>	<b>37.6190</b>	<b>24.84875</b>

*Source: Primary data*

Table 5.69 exhibits the mean and standard deviation of marital status-wise awareness on different sustainability-themed indices. It can be observed from mean and standard deviation figures that there are minor differences in the awareness levels of sustainability-themed indices among different marital status groups. In terms of the S&P BSE 100 ESG Index, the separated group had the lowest mean awareness score of 2.2857 while the widowed group had the highest mean awareness score of 3.7. Married investors had the highest mean awareness score for S&P BSE CARBONEX and S&P BSE GREENEX, while separated investors had the lowest score. Investors who are not yet married had the highest mean score across all other indexes. It can be also noted from the table that the separated group of investors has the lowest mean awareness on all the sustainability-themed indices.

Overall, the total awareness on sustainability-themed indices was found to be relatively low across all investors irrespective of marital status, with the highest total awareness score observed for the single group with a mean value of 49.5017, immediately followed by the married group with a mean value of 49.0840 and the lowest total awareness score observed among the separated group mean value of 37.619.

#### **5.4.5.5.2.1. Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Sustainability-themed Indices**

To test if there is any difference in awareness about sustainability-themed indices and the marital status of the investors, a hypothesis was developed as described below:

**H<sub>0</sub>**: There is no significant difference in the awareness on sustainability-themed indices among different marital status groups.

**H<sub>1</sub>**: There is a significant difference in the awareness on sustainability-themed indices among different marital status groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.70.

**Table 5.70**  
**Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Sustainability-themed Indices**

<b>Dependent Variable</b>	<b>Independent variable (Marital Status)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Indices	Single	287.19	1.954	0.582
	Married	281.30		
	Widowed	290.25		
	Separated	201.93		

*Source: Primary data*

It is evident from Table 5.70 that the p-value (Sig value 0.582) is greater than 0.05, which means the null hypothesis is accepted. This means that there is no significant difference in the level of awareness of various sustainability-themed indices among investors of different marital status groups.

**5.4.5.5.3. Awareness on Sustainability-themed Funds: Marital Status-wise Comparison**

A comparison is made between the levels of awareness about various sustainability-themed funds among different marital status groups. The mean and standard deviation demonstrate the extent of understanding on sustainability-themed funds among investors of different marital status groups.

**Table 5.71**

**Mean & Standard Deviation Showing Marital Status-wise Awareness on Sustainability-themed funds**

Variables	Marital Status							
	Single		Married		Widowed		Separated	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.4072	1.41573	2.3286	1.44588	2.8000	1.47573	1.8571	1.57359
Tata Ethical Fund	2.7062	1.45084	2.6714	1.52803	2.7000	1.33749	2.1429	1.67616
Nippon India Shariah BeEs	2.4175	1.39053	2.4164	1.50735	2.5000	1.17851	2.0000	1.52753
Axis ESG Equity Fund	2.2680	1.36207	2.2351	1.39346	2.7000	1.33749	2.0000	1.52753
Quantum India ESG Equity Fund	2.0670	1.26354	2.0623	1.31494	2.7000	1.41814	1.8571	1.21499
Taurus Ethical Fund	2.4072	1.41573	2.3286	1.44588	2.8000	1.47573	1.8571	1.57359
Avendus India ESG Fund	2.7113	1.45009	2.6714	1.52803	2.7000	1.33749	2.1429	1.67616
Mirae Asset ESG Sector Leaders ETF	2.0670	1.26354	2.0623	1.31494	2.7000	1.41814	1.8571	1.21499

Aditya Birla Sun Life ESG fund	2.4175	1.39053	2.4164	1.50735	2.5000	1.17851	2.0000	1.52753
ICICI prudential ESG fund	2.2629	1.36118	2.2351	1.39346	2.7000	1.33749	2.0000	1.52753
Kotak ESG opportunities fund	2.1701	1.35315	2.2125	1.41729	2.6000	1.26491	1.8571	1.21499
Quant ESG equity fund	1.9485	1.22471	1.9773	1.27455	2.5000	1.26930	1.8571	1.21499
Invesco ESG equity fund	2.1856	1.36826	2.1445	1.37100	2.6000	1.42984	2.1429	1.57359
HSBC Global Equity Climate Change Fund of Fund	2.2784	1.38266	2.1813	1.37179	2.7000	1.33749	2.1429	1.57359
<b>Total Awareness on Sustainability-themed Funds</b>	<b>46.1635</b>	<b>23.86292</b>	<b>45.6333</b>	<b>25.08946</b>	<b>53.1429</b>	<b>26.18441</b>	<b>39.5918</b>	<b>29.06378</b>

*Source: Primary data*

Table 5.71 depicts the mean and standard deviation of the level of awareness of investors with different marital statuses regarding sustainability-themed funds. The table reveals that the widowed group of investors has the highest level of awareness for all the funds except for Tata Ethical Fund and Avendus India ESG Fund. The table also reveals that the separated category of investors has the lowest mean score for all the funds, ranging from 1.8571 to 2.1429; this indicates that this group of investors may not be aware of or have a limited understanding of sustainability-themed funds. The total awareness of these categories was also lowest, with a mean score of 39.5918 and a standard deviation of 29.06378.

Regarding total awareness, the highest mean score was observed for the widowed group of investors, with a mean score of 53.1429 and a standard deviation of 26.18441. The lowest mean score was observed for the separated group of investors, with a mean score of 39.5918 and a standard deviation of 29.06378. However, the ranges of mean values are much lower for all the sustainability-themed funds, indicating a lack of awareness of these funds irrespective of the marital status of the respondents.

#### **5.4.5.5.3.1. Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Sustainability-themed Funds**

A hypothesis was formulated to examine the relationship between the marital status of the respondents and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different marital status groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different marital status groups.

To test this hypothesis, the non-parametric Kruskal-Wallis H test was used as the data was found to be non-normal. The results are presented in Table 5.72.

**Table 5.72**

**Results of Kruskal-Wallis H Test of Marital Status-wise Awareness on Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Marital Status)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Single	287.44	1.973	0.578
	Married	279.88		
	Widowed	323.25		
	Separated	219.64		

*Source: Primary data*

The results of the Kruskal-Wallis H test show that the p-value (significance of 0.578) is greater than 0.05. This means that the null hypothesis is accepted and that there is no significant difference in the level of awareness of various sustainability-themed funds among investors of different marital status groups.

**5.4.5.5.4. General Awareness Related to Sustainability: Marital-Status Comparison**

A comparison is made between general awareness on sustainability among different marital status groups. The mean and standard deviation are included to show the extent of general awareness about sustainability among investors of different marital status groups.

**Table 5.73****Mean and Standard Deviation Showing Marital Status-wise General Awareness Related to Sustainability**

Variables	Marital Status							
	Single		Married		Widowed		Separated	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.5928	1.21055	2.6657	1.25290	3.1000	1.59513	3.0000	1.63299
Awareness on sustainability reporting of companies	2.5619	1.29518	2.6261	1.33425	3.1000	1.52388	2.4286	1.61835
Noticing the companies that are doing sustainability reporting	2.4072	1.33279	2.5014	1.33809	2.3000	1.41814	2.4286	1.90238
Received information about sustainability rating agencies	2.211	1.3003	2.292	1.2891	2.100	1.5951	2.000	1.7321



Received information about ESG (Environment, Social and Governance) scores of companies	2.1340	1.26433	2.2436	1.30455	1.900	1.19722	2.1429	1.34519
Noticed the companies that constitute sustainability-themed indices	2.1804	1.23985	2.2691	1.36248	2.6000	1.26491	2.5714	1.51186
<b>General Awareness Related to Sustainability</b>	<b>46.9588</b>	<b>18.69599</b>	<b>48.6591</b>	<b>18.63295</b>	<b>50.3333</b>	<b>20.33364</b>	<b>48.5714</b>	<b>24.17966</b>

*Source: Primary data*

Table 5.73 presents the mean and standard deviation of general awareness related to sustainability among different marital status groups. Regarding most individual variables, the mean values are slightly higher for the widowed respondents. The results show that the mean general awareness related to sustainability is highest among the widowed group, with a mean value of 50.333 and a standard deviation of 20.33364.

Overall, these results suggest that widowed individuals may have a greater general awareness of sustainability, although there is also considerable variation in responses across different marital status groups. The result also suggests that the mean score of general awareness related to sustainability ranges from 46.9588 to 50.3333, indicating a low level of awareness among the respondents, irrespective of their marital status.

#### **5.4.5.5.4.1. Result of Kruskal-Wallis H Test of Marital Status-wise General Awareness Related to Sustainability**

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and the marital status of the investors.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different marital status groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different marital status groups.

The data was found to be non-normal thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between marital status and general awareness related to sustainability. The results of the test are presented in Table 5.74.

**Table 5.74**  
**Result of Kruskal-Wallis H Test of Marital Status-wise General Awareness**  
**Related to Sustainability**

Dependent Variable	Independent variable (Marital Status)	Mean Rank	Kruskal-Wallis H	P value
General Awareness Related to Sustainability	Single	272.06	1.411	0.703
	Married	287.92		
	Widowed	303.50		
	Separated	268.36		

*Source: Primary data*

It is observed that the Kruskal-Wallis H test result shows a value of 1.411 and a p-value of 0.703 (Sig. value 0.703). As the p-value is greater than 0.05, it is inferred that there is no significant difference in general awareness related to sustainability among the investors belonging to different marital status groups. The results of the Kruskal-Wallis H test exhibit that marital status does not have a significant impact on investors' general awareness related to sustainability.

#### **5.4.5.5.5. Overall Awareness and Dimensions: Marital Status-wise Comparison**

A marital status-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.75 exhibits the different dimensions of SRI awareness and overall SRI awareness concerning the Marital Status of the respondents.

**Table 5.75**

**Mean & Standard Deviation Showing Marital Status-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Marital Status							
	Single		Married		Widowed		Separated	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on different aspects of socially responsible investment	49.5337	22.03241	49.9547	22.03299	50.8000	21.68871	38.0000	22.80351
Awareness on sustainability-themed indices	49.5017	24.67598	49.0840	25.53490	48.6667	24.25177	37.6190	24.84875
Awareness on sustainability-themed Funds	46.1635	23.86292	45.6333	25.08946	53.1429	26.18441	39.5918	29.06378
General awareness related to Sustainability	46.9588	18.69599	48.6591	18.63295	50.3333	20.33364	48.5714	24.17966
<b>Overall Awareness on Socially Responsible Investment</b>	<b>48.0607</b>	<b>17.28518</b>	<b>48.3328</b>	<b>17.41432</b>	<b>50.7357</b>	<b>19.65323</b>	<b>40.9456</b>	<b>15.80389</b>

*Source: Primary data*

Table 5.75 reports the degree of awareness on different dimensions of socially responsible investment and overall awareness across investors from different marital status groups. It is clear from the table that the awareness on different aspects of socially responsible investment is slightly highest among the widowed group of investors, with a mean value of 50.8 and lowest among the separated group of investors, with a mean value of 38.0. Similarly, the highest degree of awareness of funds with a sustainability theme is found among widowed investors, with a mean value of 53.1429. In contrast, the lowest degree of awareness is found among separated investors, with a mean value of 39.5918. Regarding awareness on sustainability-themed indices, the mean score is highest and almost similar for single and married investors, with mean scores of 49.5017 and 49.0840, respectively. It is the lowest among the separated groups of investors, with a mean score of 37.6190. The table also reveals that the mean general awareness score is highest among the widowed respondents and lowest among the single category respondents. The overall awareness on socially responsible investment is highest among the widowed investors with a mean value of 50.7357 and standard deviation of 19.65323 and lowest among the separated investors with a mean value of 40.9456 and standard deviation of 15.80389.

Overall, the result implies that widowed investors have slightly higher awareness levels across all dimensions of socially responsible investment except for sustainability-themed indices compared to other marital status categories. While separated group of individuals tend to have the lowest level of awareness for most aspects and overall awareness. However, the awareness levels on all the aspects and overall awareness are relatively low for all groups, irrespective of their marital status.

#### **5.4.5.5.1. Result of Kruskal-Wallis H Test of Marital Status-wise Comparison of Overall Awareness on SRI**

A hypothesis is formulated to examine whether there is any significant difference in the overall awareness on socially responsible investment among different marital status groups.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different marital status groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different marital status groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.76.

**Table 5.76**  
**Result of Kruskal-Wallis H Test of Marital Status-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Marital Status)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Single	280.83	1.376	0.711
	Married	283.37		
	Widowed	303.00		
	Separated	215.36		

*Source: Primary data*

The Kruskal-Wallis H test results show that the p-value (Sig value. 0.711) is greater than 0.05, and thus the null hypothesis is accepted. That is, there is no significant difference in the overall awareness on socially responsible investment among investors of different marital status groups. This indicates that the marital status of the respondents does not have any significant influence on the overall awareness on Socially Responsible Investment.

#### **5.4.5.6. The Relationship between Average Annual Income and Awareness on Socially Responsible Investment**

An Average Annual Income-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

##### **5.4.5.6.1. Awareness on Different Aspects of Socially Responsible Investment: Average Annual Income-wise Comparison**

Table 5.77 presents a comparison of the level of awareness regarding various aspects of socially responsible investment among investors categorized by their average annual income groups. The table provides the mean and standard deviation of the awareness levels.

**Table 5.77**

**Mean & Standard Deviation Showing Average Annual Income-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Average Annual Income									
	Below Rupees 250000		Rs.250001- Rs.500000		Rs.500001- Rs.750000		Rs.750001- Rs.1000000		Above Rs.1000000	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.7128	1.44505	2.7161	1.41768	2.5882	1.65029	2.5152	1.35013	2.4828	1.41308
Ethical investment	3.2926	1.39692	3.1097	1.42595	3.0294	1.48596	3.0000	1.35873	2.9425	1.40063
Community investment	2.4840	1.31822	2.3871	1.28117	2.2647	1.43118	2.3485	1.29487	2.1954	1.31042
ESG investment	2.4894	1.40849	2.4516	1.42880	2.5147	1.52093	2.5303	1.37247	2.3793	1.38296
Sustainable investment	2.5106	1.43482	2.5195	1.41523	2.5000	1.50124	2.6061	1.42374	2.3793	1.38296
Mission-based investment	2.6543	1.49603	2.3742	1.36348	2.6324	1.51514	2.6667	1.45002	2.5172	1.43755
Impact investment	2.3723	1.41409	2.1484	1.32309	2.1471	1.37423	2.0758	1.25650	2.1149	1.26146



Islamic investment	2.7074	1.51800	2.5097	1.51344	2.4412	1.58710	2.2121	1.48340	2.2529	1.45649
Green bond	2.2660	1.34582	2.1419	1.26100	2.2059	1.37742	2.1364	1.35745	2.1494	1.29874
Green governance	2.3936	1.43834	2.1871	1.34255	2.3088	1.42742	2.1364	1.36873	2.1839	1.33407
<b>Total Awareness on Different Aspects of Socially Responsible Investment</b>	<b>51.7660</b>	<b>21.98659</b>	<b>49.2338</b>	<b>22.01508</b>	<b>49.2647</b>	<b>23.81246</b>	<b>48.4545</b>	<b>19.86972</b>	<b>47.1954</b>	<b>22.29080</b>

*Source: Primary data*

Table 5.77 describes the degree of awareness on various aspects of socially responsible investment among investors with varying average annual incomes. The average level of awareness for the majority of the aspects of socially responsible investment is slightly highest among investors earning less than Rs. 250000. The highest mean score was recorded for ethical investing among all income categories, with average scores ranging from 2.9425 to 3.2926. In other words, regardless of income level, investors are aware of the concept of ethical investment. For socially responsible investment, the highest mean score is found for investors with an average annual income between Rs. 250001 and Rs.500000, followed closely by investors with incomes less than Rs 250000. The awareness level then decreases as the average annual income increases. The same pattern can be observed for ethical investment and community investment.

However, for other aspects such as impact investment, Islamic investment, green bonds and green governance, the mean awareness level is highest among investors with an average annual income of less than 250000 rupees. For these variables, the degree of awareness tends to decrease with an increase in average annual income, except for the above Rs1000000 income group. The table also suggests that the total awareness score for various aspects of SRI is highest among investors belonging to the Rs 250000 income group with a mean value of 51.7660, followed by the Rs 500001-Rs 750000 income group and Rs 250001- Rs 500000 average income group with mean scores of 49.2647 and 49.2338 respectively. The lowest level of awareness was observed for investors with above Rs 1000000 average annual incomes. Overall, the table suggests that investors with low average annual incomes are more aware of various aspects of socially responsible investment than those with high average annual incomes. However, the level of awareness is relatively low across all income groups, with a mean score ranging from 47.1954 to 51.7660 and only a slight variation across all income groups.

#### 5.4.5.6.1.1. Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Different Aspects of Socially Responsible Investment

To determine whether there is any difference in awareness on different aspects of SRI and average annual income, a hypothesis is developed, which is described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different average annual income groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different average annual income groups.

A non-parametric alternative, the Kruskal-Wallis H test, was used to test the hypothesis because the data was found to be non-normal. The results of the test are presented in Table 5.78.

**Table 5.78**  
**Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Average Annual Income)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Below Rupees 250000	298.38	3.498	0.478
	Rs.250001- Rs.500000	278.15		
	Rs.500001- Rs.750000	273.76		
	Rs.750001- Rs.1000000	279.05		
	Above Rs.1000000	262.09		

*Source: Primary data*

Table 5.78 exhibits the results of the Kruskal-Wallis H tests. It can be observed from Table 5.38 that the p-value (Sig. value 0.478) is greater than 0.05, so the null hypothesis is accepted. This implies no significant difference in the level of awareness about various aspects of SRI among investors of different average annual income groups.

#### 5.4.5.6.2. Awareness on Sustainability-themed Indices: Average Annual Income-wise Comparison

The awareness level on various sustainability-themed indices among investors classified by their average annual income groups is portrayed in Table 5.79. The mean and standard deviation provide an understanding of the level of awareness about sustainability-themed indices among investors of different average annual income groups.

**Table 5.79**

#### **Mean & Standard Deviation Showing Average Annual Income-wise Awareness on Sustainability-themed Indices**

Variables	Average Annual Income									
	Below Rupees 250000		Rs.250001- Rs.500000		Rs.500001- Rs.750000		Rs.750001- Rs.1000000		Above Rs.1000000	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	2.9468	1.56408	2.6968	1.38346	2.8382	1.49237	2.6970	1.53893	2.8391	1.51637
S&P BSE CARBONEX	2.3936	1.41963	2.1097	1.25650	2.3382	1.38876	2.1818	1.38018	2.2644	1.41799
S&P BSE GREENEX	2.2979	1.32705	2.0710	1.23850	2.4706	1.38726	2.0909	1.38927	2.2414	1.38064
NIFTY100 ESG Index	2.8617	1.47057	2.5871	1.39938	2.7794	1.46446	2.5606	1.57996	2.4713	1.44543

NIFTY 100 Enhanced ESG Index	2.6011	1.47180	2.4258	1.38146	2.5441	1.41878	2.4242	1.50957	2.3678	1.41516
MSCI ESG India Index	2.2979	1.36284	2.1355	1.20107	2.3529	1.40112	2.2424	1.41487	2.2529	1.37434
<b>Total Awareness on sustainability- themed indices</b>	<b>51.3298</b>	<b>25.13550</b>	<b>46.7527</b>	<b>23.54863</b>	<b>51.0784</b>	<b>25.49959</b>	<b>47.3232</b>	<b>27.13196</b>	<b>48.1226</b>	<b>26.34349</b>

*Source: Primary data*

Based on the investors' average annual income, Table 5.79 shows the mean and standard deviation of awareness on sustainability-themed indices. The table clearly shows that investors below Rs 250000 average annual income have slightly higher awareness for most sustainability-themed indices except for the S&P BSE GREENEX and MSCI ESG India Index. For S&P BSE GREENEX and MSCI ESG India Index, investors in the Rs 500001-Rs750000 average annual income category have a slightly higher level of awareness than other categories. In the case of total awareness on sustainability-themed indices, investors having less than Rs 250000 average annual income have the highest level of awareness with a mean score of 51.3298 and a standard deviation of 25.13550, immediately followed by the Rs 500001-Rs750000 income group with a mean score of 51.0784 and a standard deviation of 25.49959.

All other categories have low awareness levels, but the investors in the Rs 250001–Rs500000 average annual income category have the lowest awareness level on sustainability-themed indices, with a mean score of 46.7527 and a standard deviation of 23.54863. The overall results suggest that the awareness on social responsibility-themed indices is comparatively low among investors irrespective of their average annual income, and the mean values range from 46.7527 to 51.3298.

#### 5.4.5.6.2.1. Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Sustainability-themed Indices

To test if there is any difference in awareness about sustainability-themed indices and the average annual income of the investors, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different average annual income groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different average annual income groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test was used because the data was found to be non-normal. The results of the test are presented in Table 5.80.

**Table 5.80**  
**Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Sustainability-themed Indices**

Dependent Variable	Independent variable (Average Annual Income)	Mean Rank	Kruskal-Wallis H	P value
Awareness on Sustainability-themed Indices	Below Rupees 250000	297.58	3.872	0.424
	Rs.250001- Rs.500000	269.84		
	Rs.500001- Rs.750000	295.34		
	Rs.750001- Rs.1000000	266.97		
	Above Rs.1000000	274.22		

*Source: Primary data*

Table 5.80 highlights that the p-value (Sig value. 0.424) is greater than 0.05; thus, the null hypothesis is accepted. This shows no significant difference in the level of awareness of various sustainability-themed indices among investors belonging to different average annual income groups.

### 5.4.5.6.3. Awareness on Sustainability-themed Funds: Average Annual Income-wise Comparison

Table 5.81 compares the awareness levels related to different sustainability-themed funds among investors who are grouped based on their average annual income. The mean and standard deviation are presented to give an insight into the level of understanding regarding sustainability-themed funds among investors of different average income groups.

**Table 5.81**

#### **Mean & Standard Deviation Showing Average Annual Income-wise Awareness on Sustainability-themed Funds**

Variables	Average Annual Income									
	Below Rupees 250000		Rs.250001- Rs.500000		Rs.500001- Rs.750000		Rs.750001- Rs.1000000		Above Rs.1000000	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.4681	1.45302	2.3613	1.40446	2.2647	1.44158	2.2273	1.53718	2.2874	1.38856
Tata Ethical Fund	2.9415	1.53455	2.6839	1.44938	2.2059	1.38821	2.5909	1.51888	2.5287	1.48511
Nippon India Shariah BeEs	2.6596	1.52731	2.3548	1.40843	2.1176	1.31046	2.3030	1.45676	2.2989	1.47155



Axis ESG Equity Fund	2.3723	1.41787	2.1935	1.31967	2.2941	1.47677	2.0455	1.34086	2.2184	1.36761
Quantum India ESG Equity Fund	2.2287	1.33878	2.0323	1.20830	1.8971	1.25947	1.9091	1.35564	2.0690	1.33637
Taurus Ethical Fund	2.4681	1.45302	2.3613	1.40446	2.2647	1.44158	2.2273	1.53718	2.2874	1.38856
Avendus India ESG Fund	2.9415	1.53455	2.6903	1.44854	2.2059	1.38821	2.5909	1.51888	2.5287	1.48511
Mirae Asset ESG Sector Leaders ETF	2.2287	1.33878	2.0323	1.20830	1.8971	1.25947	1.9091	1.35564	2.0690	1.33637
Aditya Birla Sun Life ESG fund	2.6596	1.52731	2.3548	1.40843	2.1176	1.31046	2.3030	1.45676	2.2989	1.47155
ICICI prudential ESG fund	2.3723	1.41787	2.1871	1.31814	2.2941	1.47677	2.0455	1.34086	2.2184	1.36761
Kotak ESG opportunities fund	2.3511	1.44568	2.2645	1.39609	1.9118	1.24271	2.0000	1.35873	2.1379	1.35692

Quant ESG equity fund	2.0213	1.27903	1.9677	1.20830	1.8676	1.20824	1.8636	1.31133	2.0575	1.29719
Invesco ESG equity fund	2.2660	1.42683	2.1742	1.31992	1.9853	1.33263	2.0000	1.41421	2.2069	1.33937
HSBC Global Equity Climate Change Fund of Fund	2.2819	1.40294	2.2581	1.33795	2.1471	1.41700	2.0909	1.43288	2.1954	1.32804
<b>Total Awareness on Sustainability-themed Funds</b>	<b>48.9438</b>	<b>25.22587</b>	<b>45.5945</b>	<b>23.22920</b>	<b>42.1008</b>	<b>23.99039</b>	<b>43.0087</b>	<b>25.53064</b>	<b>44.8604</b>	<b>25.77923</b>

Source: Primary data

Table 5.81 shows that the awareness levels of sustainability-themed funds are slightly higher among respondents with an average annual income of less than Rs 250000. Investors of less than Rs 250000 average annual income group have slightly higher mean scores than other income groups for all sustainability-themed funds except Quant ESG equity fund. Investors with average yearly incomes below Rs250000 also have slightly higher mean scores than other categories regarding the overall understanding of sustainability-themed funds.

It is evident that in most social responsibility-themed funds and in terms of total awareness, investors in the Rs 500001-Rs 750000 income bracket have the lowest level of awareness compared to other categories.

The total awareness is highest for investors with an average annual income of less than Rs 250000, with a mean score of 48.9438 and a standard deviation of 25.22587. The overall awareness and awareness on specific funds is relatively low across all income categories of investors. The individual mean scores and total mean scores of sustainability-themed funds range from 1.8636 to 2.9415 and 42.1008 to 48.9438, respectively. This implies that the levels of awareness on sustainability-themed funds are very low.

#### **5.4.5.6.3.1. Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Sustainability-themed Funds**

A hypothesis was developed to examine the relationship between the average annual income of the respondents and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different average annual income groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different average annual income groups.

To test this hypothesis, the non-parametric Kruskal-Wallis H test was used as the data was found to be non-normal. The results are presented in Table 5.82.

**Table 5.82****Results of Kruskal-Wallis H Test of Average Annual Income-wise Awareness on Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Average Annual Income)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Below Rupees 250000	303.10	6.910	0.141
	Rs.250001- Rs.500000	285.91		
	Rs.500001- Rs.750000	253.51		
	Rs.750001- Rs.1000000	261.70		
	Above Rs.1000000	270.34		

*Source: Primary data*

The results of the Kruskal-Wallis H test show that the p-value (with a significance of 0.141) is greater than 0.05; thus, the null hypothesis is accepted, and there is no significant difference in the level of awareness of various sustainability-themed funds among investors of different average annual income groups.

#### 5.4.5.6.4. General Awareness Related to Sustainability: Average Annual Income-wise Comparison

The general awareness on sustainability is studied among investors from different average annual income groups. The mean and standard deviation on general awareness on sustainability are exhibited in Table 5.83.

**Table 5.83**

**Mean and Standard Deviation Showing Average Annual Income-wise General Awareness Related to Sustainability**

Variables	Average annual income									
	Below Rupees 250000		Rs.250001- Rs.500000		Rs.500001- Rs.750000		Rs.750001- Rs.1000000		Above Rs.1000000	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.6702	1.26143	2.7935	1.23107	2.5735	1.31939	2.7424	1.30456	2.3563	1.12039
Awareness on sustainability reporting of companies	2.4787	1.24298	2.6645	1.33035	2.6471	1.40112	2.9545	1.48253	2.5057	1.28383

Noticing the companies that are doing sustainability reporting	2.3404	1.31672	2.4452	1.33457	2.3971	1.35095	3.0000	1.47804	2.4138	1.22524
Received information about sustainability rating agencies	2.255	1.2953	2.181	1.2456	2.294	1.3720	2.455	1.4270	2.218	1.2706
Received information about ESG (Environment, Social and Governance) scores of companies	2.1915	1.27734	2.2387	1.35361	2.2941	1.33896	2.3333	1.31656	1.9655	1.11489
Noticed the companies that constitute sustainability-themed indices	2.1915	1.28983	2.2903	1.34342	2.4559	1.27471	2.4697	1.44882	1.9655	1.24310
<b>General Awareness Related to Sustainability</b>	<b>47.0922</b>	<b>17.97029</b>	<b>48.7097</b>	<b>19.65939</b>	<b>48.8725</b>	<b>19.10615</b>	<b>53.1818</b>	<b>19.18361</b>	<b>44.7510</b>	<b>17.40706</b>

Source: Primary data

Table 5.83 portrays the degree of general awareness on sustainability based on the average annual income of investors. The data exhibits a low level of awareness of general aspects of sustainability among investors classified by income, i.e. average individual scores range between 2.181 and 3.0000 and there were only small differences in awareness between the different income groups. With a mean score of 2.7935 and a standard deviation of 1.23107, investors in the Rs 250001–Rs 500000 average annual income category are more interested in noticing the companies' CSR initiatives. Investors with an average annual income of over Rs 10 lakh are least interested in corporate CSR practices. Their overall general awareness is also less than that of other income groups, with a mean score of 44.7510.

These groups of investors may focus more on the financial return of their investment rather than non-financial aspects. For all other variables, the investors belonging to the Rs 750001-Rs1000000 average annual income category have slightly higher mean scores over other groups. That is, the total awareness on sustainability and awareness on different aspects of sustainability is highest among the investors in the Rs750001-Rs1000000 average annual income category. Since the range of the mean values for general sustainability awareness is between 44.7510 and 53.1818, it is assumed there is a low level of general sustainability awareness.

#### **5.4.5.6.4.1. Result of Kruskal-Wallis H Test of Average Annual Income-wise General Awareness Related to Sustainability**

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and the average annual income of the investors.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different average annual income groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different average annual income groups.

The data is found to be non-normal; thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between average annual income and general awareness related to sustainability. The results of the test are presented in Table 5.84.

**Table 5.84**  
**Result of Kruskal-Wallis H Test of Average Annual Income-wise General**  
**Awareness Related to Sustainability**

<b>Dependent Variable</b>	<b>Independent variable (Average Annual Income)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
General Awareness Related to Sustainability	Below Rupees 250000	275.28	7.711	0.103
	Rs.250001- Rs.500000	285.54		
	Rs.500001- Rs.750000	288.44		
	Rs.750001- Rs.1000000	326.00		
	Above Rs.1000000	255.03		

*Source: Primary data*

The findings of the Kruskal-Wallis H test highlight no significant difference in general awareness related to sustainability among the different average annual income groups with a p-value of 0.103 (Sig. value 0.103). As the p-value is greater than 0.05, the respondents' average annual income does not significantly affect investors' general awareness of sustainability.



#### 5.4.5.6.5. Overall Awareness and Dimensions: Average Annual Income-wise Comparison

An average annual income-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.85 illustrates the different dimensions of SRI awareness and overall SRI awareness concerning the average annual income of the respondents.

**Table 5.85**

**Mean & Standard Deviation Showing Average Annual Income-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Average Annual Income									
	Below Rupees 250000		Rs.250001- Rs.500000		Rs.500001- Rs.750000		Rs.750001- Rs.1000000		Above Rs.1000000	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on Different Aspects of Socially Responsible Investment	51.7660	21.98659	49.2338	22.01508	49.2647	23.81246	48.4545	19.86972	47.1954	22.29080

Awareness on sustainability-themed Indices	51.3298	25.13550	46.7527	23.54863	51.0784	25.49959	47.3232	27.13196	48.1226	26.34349
Awareness on sustainability-themed funds	48.9438	25.22587	45.5945	23.22920	42.1008	23.99039	43.0087	25.53064	44.8604	25.77923
General awareness related to Sustainability	47.0922	17.97029	48.7097	19.65939	48.8725	19.10615	53.1818	19.18361	44.7510	17.40706
<b>Overall Awareness on Socially Responsible Investment</b>	<b>49.7829</b>	<b>17.04373</b>	<b>47.5968</b>	<b>17.03042</b>	<b>47.8291</b>	<b>17.35102</b>	<b>47.9921</b>	<b>17.90328</b>	<b>46.2323</b>	<b>18.34796</b>

*Source: Primary data*

Table 5.85 exhibits the degree of awareness of various dimensions of SRI and overall awareness on socially responsible investment (SRI) among investors classified by their average annual incomes.

It is found that the majority of the variables of awareness, such as awareness on different aspects of SRI, awareness on sustainability-themed funds and indices, the investors having less than Rs 250000 average annual income group have a slightly higher level of awareness than other groups. It is also evident from Table that, in the case of overall awareness, investors having less than Rs 250000 average annual income possess a slightly higher rate of awareness compared to other categories with a mean score of 49.7829 and a standard deviation of 17.04373 and lowest among investors having more than Rs1000000 average annual income with a mean score of 46.2323 and a standard deviation of 18.34796. The awareness level for all other income categories is almost the same, with relatively similar mean values ranging from 47.5968 to 47.9921. The mean scores of awareness on different dimensions and overall awareness on SRI reveal that the investors have limited awareness of SRI irrespective of their income.

#### **5.4.5.6.5.1. Result of Kruskal-Wallis H Test of Average Annual Income-wise Comparison of Overall Awareness on SRI**

To examine whether there is any significant difference in the overall awareness on socially responsible investment among different average annual income groups of the respondents, a hypothesis is formulated.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different average annual income groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different average annual income groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. The Kruskal Wallis H test was used to test the hypothesis, and the result is exhibited in Table 5.86.

**Table 5.86**

**Result of Kruskal-Wallis H Test of Average Annual Income-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Average Annual Income)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Below Rupees 250000	298.10	3.569	0.467
	Rs.250001- Rs.500000	277.22		
	Rs.500001- Rs.750000	279.01		
	Rs.750001- Rs.1000000	278.96		
	Above Rs.1000000	260.30		

*Source: Primary data*

The Kruskal-Wallis H test results show that the p-value is greater than 0.05 (Sig value. 0.467) and thus, the null hypothesis is accepted. That is, there is no significant difference in the overall awareness on socially responsible investment among investors from different average annual income groups.

**5.4.6. The Relationship between Stock Market Participation and Awareness on Socially Responsible Investment**

The participation of investors in the stock market may enhance their understanding on different financial instruments in the stock market, trading strategies and overall understanding of the stock market. The experience of the investors may also create awareness on socially responsible investment.

**5.4.6.1. The Relationship between Experience and Awareness on Socially Responsible Investment**

The stock market experiences of the investors are compared to different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment.

#### **5.4.6.1.1. Awareness on Different Aspects of Socially Responsible Investment: Experience-wise Comparison**

Table 5.87 compares awareness levels on various concepts related to socially responsible investment among individuals with varying experience levels. The mean and standard deviation values highlight the extent and variability of awareness about different aspects of socially responsible investment with different experience levels. The table details individuals' familiarity with various aspects of socially responsible investment depending on their experience level.

#### 5.4.6.1.1. Awareness on Different Aspects of Socially Responsible Investment: Experience-wise Comparison

Table 5.87 compares awareness levels on various concepts related to socially responsible investment among individuals with varying experience levels. The mean and standard deviation values highlight the extent and variability of awareness about different aspects of socially responsible investment with different experience levels. The table details individuals' familiarity with various aspects of socially responsible investment depending on their experience level.

**Table 5.87**

#### **Mean & Standard Deviation Showing Experience-wise Awareness on Different Aspects of Socially Responsible Investment**

Variables	Experience in Stock Market Operation									
	Below one year		1- 3 years		3-5 years		5-10 years		Above 10 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Socially responsible investment	2.6061	1.43435	2.5912	1.47216	2.5806	1.42734	2.8542	1.47954	2.6818	1.35879
Ethical investment	2.9621	1.38369	3.0943	1.42666	3.1097	1.43050	3.3438	1.40546	3.4091	1.36832
Community investment	2.3030	1.28372	2.2642	1.33337	2.4000	1.29234	2.5417	1.34491	2.5909	1.46902
ESG investment	2.2348	1.32998	2.4465	1.46109	2.5419	1.41531	2.6667	1.44853	2.6818	1.35879
Sustainable investment	2.2121	1.34238	2.5220	1.46623	2.5909	1.41705	2.6979	1.43725	2.6364	1.46533

Mission-based investment	2.1136	1.31142	2.5660	1.49484	2.7419	1.43173	2.7708	1.47598	2.8636	1.42413
Impact investment	2.0530	1.28595	2.1950	1.38014	2.2000	1.33095	2.4167	1.36626	2.4091	1.40269
Islamic investment	2.3561	1.47308	2.4906	1.56653	2.4710	1.49592	2.6354	1.52260	2.8636	1.58251
Green bond	2.1288	1.29830	2.1509	1.31779	2.3032	1.34055	2.1146	1.24706	2.4091	1.59341
Green governance	2.1970	1.36722	2.1950	1.38014	2.3355	1.39236	2.3229	1.40297	2.4091	1.50108
<b>Total Awareness on Different Aspects of Socially Responsible Investment</b>	<b>46.3333</b>	<b>21.76231</b>	<b>49.0314</b>	<b>22.23107</b>	<b>50.7013</b>	<b>21.22834</b>	<b>52.7292</b>	<b>22.74827</b>	<b>53.9091</b>	<b>23.09795</b>

Source: Primary data

Table 5.87 illustrates the level of awareness on various aspects of socially responsible investment (SRI) based on the investors' experience in stock market operations. The table clearly shows that investors with more than 10 years of stock market experience have the highest understanding on various SRI aspects, with a mean value of 53.9091 and a standard deviation of 23.09795. It is also evident from the table that investors with less than one year of experience have the lowest level of understanding of various aspects related to SRI compared to other groups, with a mean value of 46.3333 and a standard deviation of 21.76231. These findings imply that investors with more experience in the stock market tend to have higher awareness of concepts related to socially responsible investment (SRI) than those with less experience. The mean score for ethical investment is highest among investors with more than ten years of experience, with a mean score of 3.4091 and lowest among investors with less than one year of experience, with a mean score of 2.9621. It is also important to note that ethical investment is a comparatively known concept compared to other concepts across all investors. However, in the case of SRI, the awareness is comparatively low compared to ethical investment.

On the other hand, the lowest mean score, 2.0530, is observed for impact investment by investors with less than one year of experience. For other concepts such as ethical investment, mission-based investment, ESG investment, Sustainable investment, and Islamic investment, the investors' level of awareness slightly increases with their experience in the stock market. This implies that the experience may be considered as a factor in increasing awareness on SRI and related concepts of SRI. However, the overall awareness on SRI-related concepts is relatively low across all investors, irrespective of their experience in the stock market, because the mean values range between 46.3333 and 53.9091.

#### **5.4.6.1.1.1. Results of Kruskal-Wallis H Test of Experience-wise Awareness on Different Aspects of Socially Responsible Investment**

To identify whether there is any difference in awareness of different aspects of SRI and the experience of the investors in the stock market operation, a hypothesis is developed, which is described below:



**H<sub>0</sub>:** There is no significant difference in the awareness on different aspects of socially responsible investment among different experience groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on different aspects of socially responsible investment among different experience groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test, was used because the data was found to be non-normal. The results of the test are presented in Table 5.88.

**Table 5.88**  
**Results of Kruskal-Wallis H Test of Experience-wise Awareness on Different Aspects of Socially Responsible Investment**

<b>Dependent Variable</b>	<b>Independent variable (Experience in Stock Market Operation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Different Aspects of Socially Responsible Investment	Below one year	255.66	6.858	0.144
	1- 3 years	275.94		
	3-5 years	293.09		
	5-10 years	303.45		
	Above 10 years	312.64		

*Source: Primary data*

It can be observed from Table 5.88 that the p-value (Sig. value 0.144) is greater than 0.05, so the null hypothesis is accepted. This indicates no significant difference in the level of awareness about various SRI aspects among investors from different experience groups.

#### **5.4.6.1.2. Awareness on Sustainability-themed Indices: Experience-wise Comparison**

The degree of awareness on different sustainability-themed indices among investors with varying levels of experience is displayed in Table 5.89. The mean and standard deviation exhibit how familiar investors are with various sustainability-themed indices depending on their experience level in the stock market.

**Table 5.89**

**Mean & Standard Deviation Showing Experience-wise Awareness on Sustainability-themed Indices**

Variables	Experience in Stock Market Operation									
	Below one year		1- 3 years		3-5 years		5-10 years		Above 10 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
S&P BSE 100 ESG Index	2.5227	1.44342	2.8302	1.54349	2.9032	1.42234	2.9583	1.52120	3.3182	1.67293
S&P BSE CARBONEX	2.1364	1.28866	2.3333	1.43935	2.2194	1.33519	2.2604	1.32383	2.8636	1.64159
S&P BSE GREENEX	2.1061	1.25557	2.2264	1.36838	2.1484	1.26282	2.3646	1.36204	2.8182	1.65145
NIFTY100 ESG Index	2.5682	1.39898	2.6855	1.51840	2.6000	1.42610	2.8229	1.44364	3.2727	1.69542
NIFTY 100 Enhanced ESG Index	2.4167	1.33103	2.4969	1.51730	2.3742	1.40106	2.6458	1.42887	3.0000	1.63299
MSCI ESG India Index	2.0530	1.19359	2.2767	1.37294	2.2000	1.28123	2.4062	1.38851	2.8182	1.70814
<b>Total Awareness on Sustainability-themed Indices</b>	<b>46.0101</b>	<b>23.66518</b>	<b>49.4969</b>	<b>26.14788</b>	<b>48.1505</b>	<b>23.85061</b>	<b>51.5278</b>	<b>25.66048</b>	<b>60.3030</b>	<b>31.38613</b>

*Source: Primary data*

Table 5.89 shows the awareness level of investors towards different sustainability-themed indices by the investors categorized into five groups based on their experience in stock market operations. The social responsibility-themed indices include S&P BSE 100 ESG Index, S&P BSE CARBONEX, S&P BSE GREENEX, NIFTY100 ESG Index, NIFTY 100 Enhanced ESG Index and MSCI ESG India Index. It is revealed that for all sustainability-themed indices, investors with more than ten years of experience in the stock market have the highest level of awareness compared to other groups. In contrast, investors with less than one year of experience have the lowest mean score for all indices except for the NIFTY 100 Enhanced ESG Index. This suggests that the experience of the investors may influence their awareness of sustainability-themed indices. For the S&P BSE 100 ESG Index, investors with more than ten years of experience have the highest level of awareness, with a mean score of 3.3182 and a standard deviation of 1.67293. Additionally, the table reveals that the investors with over ten years of experience have the highest mean score, with a mean of 3.3182 and a standard deviation of 1.67293, followed by the NIFTY100 ESG Index, with a mean of 3.2727 and a standard deviation of 1.69542. Similarly, investors with less than one year of experience have the lowest mean score for the MSCI ESG India Index with a mean of 2.0530 and a standard deviation of 1.19359. The overall awareness score on sustainability-themed indices rises with stock market experience, ranging from 46.0101 for investors with less than one year of experience to 60.3030 for those with more than ten years of experience. Although the mean score for different degrees of experience in stock market operations ranges from 46.0101 to 60.3030, it can be concluded that investors have a relatively low level of awareness regarding various sustainability-related indices.

#### **5.4.6.1.2.1. Results of Kruskal-Wallis H Test of Experience-wise Awareness on Sustainability-themed Indices**

To test if there is any difference in awareness about sustainability-themed indices and the experience of investors, a hypothesis was developed as described below:

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed indices among different experience groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed indices among different experience groups.

To test the hypothesis, a non-parametric alternative, the Kruskal-Wallis H test, was used because the data was found to be non-normal. The results of the test are presented in Table 5.90.

**Table 5.90**  
**Results of Kruskal-Wallis H Test of Experience-wise Awareness on Sustainability-themed Indices**

<b>Dependent Variable</b>	<b>Independent variable (Experience in Stock Market Operation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Indices	Below one year	263.87	5.667	0.225
	1- 3 years	284.46		
	3-5 years	278.40		
	5-10 years	298.10		
	Above 10 years	340.89		

*Source: Primary data*

Table 5.90 portrays that the p-value (Sig value. 0.225) is greater than 0.05. Thus, the null hypothesis is accepted. This reveals no significant difference in the level of awareness of various sustainability-themed indices among investors of different experience groups.

**5.4.6.1.3. Awareness on Sustainability-themed Funds: Experience-wise Comparison**

Table 5.91 compares the awareness level of investors on various sustainability-themed funds with respect to their experience. The mean and standard deviation values exhibit the level of awareness on sustainability-themed funds among investors with different levels of experience.

**Table 5.91**

**Mean & Standard Deviation Showing Experience-wise Awareness on Sustainability-themed Funds**

Variables	Experience in Stock Market Operation									
	Below one year		1- 3 years		3-5 years		5-10 years		Above 10 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
SBI Magnum Equity ESG Fund	2.2500	1.28036	2.2830	1.52669	2.3161	1.44938	2.5625	1.41282	2.9545	1.55769
Tata Ethical Fund	2.5758	1.38763	2.6730	1.49893	2.5548	1.51247	2.9687	1.56577	2.9091	1.65929
Nippon India Shariah BeEs	2.2803	1.33830	2.3585	1.50225	2.4129	1.51094	2.5938	1.39607	2.8182	1.73580
Axis ESG Equity Fund	2.1970	1.24446	2.1635	1.45339	2.1806	1.35067	2.5104	1.40671	2.5909	1.65210
Quantum India ESG Equity Fund	1.9773	1.13559	1.8994	1.31782	2.1097	1.33177	2.3750	1.29980	2.3182	1.61500
Taurus Ethical Fund	2.2500	1.28036	2.2830	1.52669	2.3161	1.44938	2.5625	1.41282	2.9545	1.55769
Avendus India ESG Fund	2.5833	1.38719	2.6730	1.49893	2.5548	1.51247	2.9687	1.56577	2.9091	1.65929

Mirae Asset ESG Sector Leaders ETF	1.9773	1.13559	1.8994	1.31782	2.1097	1.33177	2.3750	1.29980	2.3182	1.61500
Aditya Birla Sun Life ESG fund	2.2803	1.33830	2.3585	1.50225	2.4129	1.51094	2.5938	1.39607	2.8182	1.73580
ICICI prudential ESG fund	2.1894	1.24258	2.1635	1.45339	2.1806	1.35067	2.5104	1.40671	2.5909	1.65210
Kotak ESG opportunities fund	2.0682	1.22439	2.0692	1.41027	2.2452	1.42036	2.4792	1.42887	2.4091	1.65210
Quant ESG equity fund	1.8712	1.08004	1.9182	1.31191	1.9613	1.29376	2.1667	1.24534	2.2727	1.54863
Invesco ESG equity fund	2.0152	1.16557	2.0818	1.44068	2.1806	1.41637	2.3333	1.34295	2.8636	1.61232
HSBC Global Equity Climate Change Fund of Fund	2.1894	1.21148	2.1384	1.45166	2.1355	1.39609	2.4167	1.35076	2.8182	1.59273
<b>Total Awareness on Sustainability-themed Funds</b>	<b>43.8636</b>	<b>22.20704</b>	<b>44.2318</b>	<b>25.04292</b>	<b>45.2442</b>	<b>25.31336</b>	<b>50.5952</b>	<b>24.90684</b>	<b>53.6364</b>	<b>29.08627</b>

Source: Primary data

Table 5.91 describes the investors' awareness on sustainability-themed funds based on their experience in stock market operations. The mean scores of awareness range from 1.8712 to 2.9545, with the highest mean score of 2.9545 observed for SBI Magnum Equity ESG Fund and Taurus Ethical Fund by investors with more than ten years of experience. The lowest mean score of 1.8712 was identified for Quant ESG equity fund by investors with less than one year of experience. It is evident from table that, for all sustainability-themed funds except for Mirae Asset ESG Sector Leaders ETF, investors with more than ten years of experience scored the highest degree of awareness compared to investors belonging to other groups. The overall results suggest that the total awareness on sustainability-themed funds improved with stock market experience; that is, the mean scores improved from 43.8636 for investors with less than one year of experience to 53.6364 for those with over ten years of experience. However, the mean values indicate that the investors' awareness of sustainability-themed funds is relatively low, despite some variation based on experience level.

#### **5.4.6.1.3.1. Results of Kruskal-Wallis H Test of Experience-wise Awareness on Sustainability-themed Funds**

A hypothesis was developed to examine the relationship between the experience of the investors in the stock market and awareness of sustainability-themed funds.

**H<sub>0</sub>:** There is no significant difference in the awareness on sustainability-themed funds among different experience groups.

**H<sub>1</sub>:** There is a significant difference in the awareness on sustainability-themed funds among different experience groups.

To test this hypothesis, the non-parametric Kruskal-Wallis H test was used as the data was found to be non-normal. The results are presented in Table 5.92.

**Table 5.92**  
**Results of Kruskal-Wallis H Test of Experience-wise Awareness on**  
**Sustainability-themed Funds**

<b>Dependent Variable</b>	<b>Independent variable (Experience in Stock Market Operation)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
Awareness on Sustainability-themed Funds	Below one year	273.86	6.676	0.154
	1- 3 years	270.37		
	3-5 years	276.55		
	5-10 years	315.49		
	Above 10 years	319.93		

*Source: Primary data*

It is evident from Table 5.92 that there is no significant difference in the level of awareness of various sustainability-themed funds among investors of different experience groups with a p-value of 0.154, which is greater than 0.05. Thus, the null hypothesis is accepted.



#### 5.4.6.1.4. General Awareness Related to Sustainability: Experience-wise Comparison

Table 5.93 highlights a comparison of general awareness on sustainability among investors with varying levels of experience in the stock market. The table displays the mean and standard deviation values that indicate the level and variability of awareness about sustainability across different experience groups.

**Table 5.93**

**Mean and Standard Deviation Showing Experience-wise General Awareness Related to Sustainability**

Variables	Experience in Stock Market Operation									
	Below one year		1- 3 years		3-5 years		5-10 years		Above 10 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Noticing the CSR initiatives of invested companies	2.6970	1.24139	2.5031	1.20060	2.6581	1.24023	2.8125	1.26751	2.7273	1.57908
Awareness on sustainability reporting of companies	2.5909	1.21664	2.4591	1.27658	2.5806	1.41821	2.9167	1.31122	2.6818	1.58524
Noticing the companies that are doing sustainability reporting	2.5303	1.28669	2.3396	1.32565	2.4581	1.39684	2.6458	1.32966	2.2273	1.44525

Received information about sustainability rating agencies	2.318	1.2740	2.170	1.3227	2.194	1.2848	2.417	1.2869	2.273	1.5176
Received information about ESG (Environment, Social and Governance) scores of companies	2.3106	1.32580	2.1132	1.28270	2.1419	1.26100	2.3021	1.26591	2.0909	1.41115
Noticed the companies that constitute sustainability-themed indices	2.3485	1.30170	2.2075	1.34576	2.3226	1.39076	2.0833	1.20234	2.1364	1.24577
<b>General Awareness Related to Sustainability</b>	<b>49.3182</b>	<b>18.98948</b>	<b>45.9748</b>	<b>18.27696</b>	<b>47.8495</b>	<b>18.53098</b>	<b>50.5903</b>	<b>19.17598</b>	<b>47.1212</b>	<b>19.44455</b>

*Source: Primary data*

Table 5.93 displays the general awareness level on sustainability by the investors classified based on their experience in the stock market. The highest mean score for general understanding related to sustainability is identified among investors with 5 to 10 years of experience, with a mean score of 50.5903, followed by investors with less than one year of experience, with a mean score of 49.3182. The lowest level of understanding of general sustainability is found among investors with 1 to 3 years of experience, with a mean score of 45.9748, followed by investors with more than ten years of experience, with a mean score of 47.1212. However, the standard deviation for the mean score is also highest among investors with more than 10 years of experience (19.44455), indicating greater variability in awareness levels among this group of investors. It is also evident from the table that the investors with more than ten years of experience have a mean score of 47.1212 for general awareness related to sustainability, which is lower than the mean scores of investors with 5-10 years of experience (50.5903) and below one year of experience (49.3182). This suggests that even experienced investors may have limited awareness of sustainability. Overall, the data suggests that the general awareness of sustainability is relatively low among all investors despite their experience in the stock market.

#### **5.4.6.1.4.1. Result of Kruskal-Wallis H Test of Experience-wise General Awareness Related to Sustainability**

A hypothesis was formulated to test whether there is any relationship between general awareness on sustainability and experience in stock market operation.

**H<sub>0</sub>:** There is no significant difference in the general awareness related to sustainability among different experience groups.

**H<sub>1</sub>:** There is a significant difference in the general awareness related to sustainability among different experience groups.

The data was found to be non-normal; thus, the non-parametric alternative Kruskal-Wallis H test was performed to evaluate the relationship between experience and general awareness related to sustainability. The results of the test are presented in Table 5.94.

**Table 5.94**

**Result of Kruskal-Wallis H Test of Experience-wise General Awareness Related to Sustainability**

<b>Dependent Variable</b>	<b>Independent variable (Experience in Stock Market Operation)</b>	<b>Mean Rank</b>	<b>Kruskal-Wallis H</b>	<b>P value</b>
General awareness related to Sustainability	Below one year	292.85	4.110	0.391
	1- 3 years	264.71		
	3-5 years	280.25		
	5-10 years	303.38		
	Above 10 years	273.70		

*Source: Primary data*

Kruskal-Wallis H test reveals no significant difference in the mean ranks of general awareness on sustainability among the investors with different experiences. The null hypothesis is accepted since the p-value (Sig. value 0.391) is greater than 0.05. The Kruskal-Wallis H test results imply that experience in the stock market operation does not significantly affect investors' general awareness of sustainability.

#### 5.4.6.1.5. Overall Awareness and Dimensions: Experience-wise Comparison

An experience-wise comparison is made for different dimensions of awareness on socially responsible investment and overall awareness on socially responsible investment. Table 5.95 exhibits the different dimensions of SRI awareness and overall SRI awareness concerning the experience of the investors.

**Table 5.95**

**Mean & Standard Deviation Showing Experience-wise Awareness on Different Dimensions of Socially Responsible Investment and Overall Awareness**

Variables	Experience in Stock Market Operation									
	Below one year		1- 3 years		3-5 years		5-10 years		Above 10 years	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Awareness on different Aspects of Socially Responsible Investment	46.3333	21.76231	49.0314	22.23107	50.7013	21.22834	52.7292	22.74827	53.9091	23.09795
Awareness on sustainability-themed Indices	46.0101	23.66518	49.4969	26.14788	48.1505	23.85061	51.5278	25.66048	60.3030	31.38613

Awareness on sustainability-themed funds	43.8636	22.20704	44.2318	25.04292	45.2442	25.31336	50.5952	24.90684	53.6364	29.08627
General awareness related to Sustainability	49.3182	18.98948	45.9748	18.27696	47.8495	18.53098	50.5903	19.17598	47.1212	19.44455
<b>Overall Awareness on Socially Responsible Investment</b>	<b>46.3813</b>	<b>16.45901</b>	<b>47.1837</b>	<b>17.45003</b>	<b>48.0108</b>	<b>16.88119</b>	<b>51.3606</b>	<b>17.67224</b>	<b>53.7424</b>	<b>22.27424</b>

*Source: Primary data*

Table 5.95 provides insights into the level of awareness about different dimensions of socially responsible investment (SRI) and overall awareness on SRI among investors with varying levels of experience in stock market operations. The table clearly shows that the overall awareness on SRI is improved with the experience of the investors. The results indicate that investors with more than ten years of experience have the highest level of overall awareness with a mean score of 53.7424 and standard deviation of 22.27424, while those with less than one year of experience have the lowest level of overall awareness with a mean score of 46.3813 and standard deviation of 16.45901. Even though the experience results in improved awareness on different aspects of SRI, general awareness is not improved by the experience of the investors.

The overall results indicate that the total awareness on SRI is limited among the investors and ranges between 46.3813 and 53.7424.

#### 5.4.6.1.5.1. Result of Kruskal-Wallis H Test of Experience-wise Comparison of Overall Awareness on SRI

To examine whether there is any significant difference in the overall awareness on socially responsible investment among different experience groups, a hypothesis is formulated.

**H<sub>0</sub>:** There is no significant difference in the overall awareness on socially responsible investment among different experience groups.

**H<sub>1</sub>:** There is a significant difference in the overall awareness on socially responsible investment among different experience groups.

Since the data does not follow normal distribution, the above hypothesis is validated using a non-parametric alternative. Kruskal Wallis H test was used to test the hypothesis and the result is exhibited in Table 5.96.

**Table 5.96**  
**Result of Kruskal-Wallis H Test of Experience-wise Comparison of Overall Awareness on SRI**

<b>Dependent Variable</b>	<b>Independent variable (Experience in Stock Market Operation)</b>	<b>Mean Rank</b>	<b>Kruskal- Wallis H</b>	<b>P value</b>
Overall Awareness on Socially Responsible Investment	Below one year	267.55	5.803	0.214
	1- 3 years	271.96		
	3-5 years	281.45		
	5-10 years	311.21		
	Above 10 years	317.66		

*Source: Primary data*

Kruskal-Wallis H test result indicates no significant difference amongst the various experience groups regarding their overall awareness of socially responsible investment. The null hypothesis is accepted since the p-value is greater than 0.05 (Sig value. 0.214). That is, there is no significant difference in the overall awareness on socially responsible investment among different experiences groups of investors.

Overall, the results suggest no significant relation between the stock market experience of the investors and their level of awareness on socially responsible investment (SRI). Therefore, the findings suggest that the level of awareness of SRI is not dependent on experience in stock market operations. Additionally, the analysis also shows that the overall level of awareness of SRI is limited among investors, regardless of their experience in the stock market.

## **5.5. Perception Towards Socially Responsible Investment**

Socially responsible investment (SRI) is a relatively new concept in India, and its acceptance has been growing over the last decade (Rekha, 2017; Singhal, 2021; Jonwall et al., 2022). However, the concept is still relatively new to investors in Kerala. Understanding the perception of stock market investors in Kerala towards SRI requires a comprehensive study of various aspects and dimensions of SRI. The findings from such a study may provide valuable insights into the potential of SRI in Kerala, promote socially responsible investment practices in the region, and contribute to sustainable economic development. In this section, an evaluation is made concerning investors' perception on the integration of social responsibility into investment decisions, reasons for investors' preference and non-preference for socially responsible funds, attitudes towards investing in the sin industries, perceptions of the risks associated with SRI, perceptions of businesses that engage in socially irresponsible business practices and the preference for various SRI strategies.

### **5.5.1. Opinion on Integrating the Concept of Social Responsibility into Stock Market Investment**

The respondents are requested to provide their perspective on the importance of incorporating the concept of social responsibility into stock market investment. The data was collected on a five-point scale. The opinions of the survey participants are presented in the following Table 5.97.



**Table 5.97**  
**Opinion on Integrating the Concept of Social Responsibility into Stock Market Investment**

Variables	Frequency	Percentage
Not at all important	33	5.9
Slightly Important	99	17.6
Neutral	186	33.0
Very Important	180	31.9
Extremely Important	66	11.7
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It is clear from Table 5.97 that a significant percentage of the investors (31.9 per cent) believe that the incorporation of social responsibility into stock market investment is very important, 11.7 per cent of the investors believe it is extremely important, and 17.6 per cent of the investors believe it to be somewhat important. A considerable percentage of investors (33 per cent) are neither in favour of nor against the idea of integrating social responsibility into stock market investing. Notably, barely 5.9 per cent of investors think that social responsibility should not be considered at all while making stock market investments. Overall, the result indicates that a sizeable proportion of investors (61.2 per cent) believe that incorporating social responsibility into stock market investment decisions is at least somewhat important.

#### **5.5.2. Investors' Perception Regarding the Inclusion of Social Responsibility Criteria in Their Current Company's Investment Decisions**

The investors' opinions on the inclusion of social responsibility criteria into their current company's investment decisions were gathered by using a five-point scale. Opinions on the five-point scale range from strongly oppose to strongly favour. The responses are reported in Table 5.98.

**Table 5.98**

**Investors' Perception Regarding the Inclusion of Social Responsibility Criteria in Their Current Company's Investment Decisions**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly Oppose	17	3.0
Somewhat oppose	17	3.0
Neutral	144	25.5
Somewhat favour	177	31.4
Strongly favour	209	37.1
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

From Table 5.98, it is clear that a considerable proportion of investors (31.4 per cent) favour incorporating social responsibility factors into their present company's investment decision and a significant proportion of investors (37.1 per cent) strongly support the same. 25.5 per cent of investors have a neutral opinion on such inclusion and only a very small proportion of investors are against such inclusion of social responsibility.

The overall result implies that the majority of the investors (68.5 per cent) support the inclusion of social responsibility in their current company's investment decision, with the highest number of investors (209) strongly favouring it. This shows the positive attitude of investors towards social responsibility.

### **5.5.3. Investment in a Socially Responsible Fund**

There are several mutual fund schemes and Exchange Traded Funds (ETFs) with a social responsibility focus available in India, including the Tata Ethical Fund, SBI Magnum Equity ESG Fund, Nippon India Shariah BeEs, Taurus Ethical Fund, Avendus India ESG Fund, ICICI Prudential ESG Fund, Mirae Asset ESG Sector Leaders ETF and other ESG based funds. Table 5.99 below lists the respondents who have and have not invested in any of these sustainability-related funds.

**Table 5.99**  
**Investment in a Socially Responsible fund**

Variables	Frequency	Percentage
Not invested	526	93.3
Invested	38	6.7
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Of the total, only 38 investors have invested in a socially responsible fund, and 526 investors have not invested in a socially responsible fund. The majority of respondents (93.3 per cent) said they had not invested in a socially responsible fund. The majority of respondents (93.3 per cent) have not invested in a socially responsible fund.

#### **5.5.3.1. Motives behind the Preference for a Socially Responsible Investment**

The investors who have invested in any socially responsible funds are requested to explain the reasons behind their preference for such investments. Table 5.100 outlines these factors influencing the choice for SRI.

**Table 5.100**  
**Motives behind the Preference for a Socially Responsible Investment**

Reasons	Not a Motive		Motive		Total	
	Frequency	Percentage	Frequency	Percentage	Total	Percentage
Security of investing in sustainable products	10	26.3	28	73.7	38	100
Reasonable return	10	26.3	28	73.7	38	100
As a part of social and environmental commitment	20	52.6	18	47.4	38	100

Ethical or religious reasons	25	65.8	13	34.2	38	100
Advice from bank	27	71.1	11	28.9	38	100
Others	34	89.5	4	10.5	38	100

Source: Primary data

Table 5.100 exhibits the factors influencing investors in selecting socially responsible funds. From the survey, it is found that only 38 respondents have invested SRI. Out of 38 respondents, the majority (73.7 per cent) opined that the security of investing in sustainable products and reasonable returns are the motivating factors for them to invest in SRI. 47.4 per cent of investors prefer SRI as a part of their social and environmental commitment and 34.2 per cent for ethical and religious reasons. 28.9 per cent of investors opined that the advice from the banks motivated them to select SRI. The remaining investors expressed that socially responsible investments are less risky and offer greater returns than traditional investments. Thus, the result implies that investors believe that socially responsible investment may provide adequate returns and a safe alternative to traditional investments.

### 5.5.3.2. Reason behind Not Preferring a Socially Responsible Investment

Investors who have not invested in a socially responsible fund are requested to express the reason behind their non-preference for socially responsible investments. These reasons are portrayed in Table 5.101.

**Table 5.101**

#### **Reason behind Not Preferring a Socially Responsible Investment**

Reasons	Not a Reason		Reason		Total	
	Frequency	Percentage	Frequency	Percentage	Total	Percentage
Lack of awareness	166	31.6	360	68.4	526	100
Low returns	236	44.9	290	55.1	526	100
Profit motivated	287	54.6	239	45.4	526	100

Lack of commitment	429	81.6	97	18.4	526	100
Doubts about the relationship between social and environmental variables and returns	413	78.5	113	21.5	526	100
Lack of governmental endorsement	446	84.8	80	15.2	526	100

*Source: Primary data*

Table 5.101 highlights the reasons behind the non-preference for SRI by the investors. It is already found that a large majority of investors have not purchased any of the socially responsible financial products. It is revealed from the table that, out of the total 526 respondents, the highest number of respondents (360 respondents) opined that lack of awareness is the reason behind their non-preference for SRI. This implies that the majority of the investors are not aware of sustainability-themed investment options and financial products. Investors posited low returns as their second most important concern for not preferring SRI, followed by profit motivation (45.4 per cent). This shows that many investors (290 respondents) believe that SRI may yield lower returns than other investment alternatives, and a sizable proportion of investors give more importance to profit from investment. Additionally, it was discovered that 18.4 per cent of investors claimed that lack of commitment was a reason for not favouring SRI. In comparison, 21.5 per cent of investors mentioned uncertainty regarding the link between social and environmental factors and returns as a reason for not investing in SRI. 15.2 per cent of investors claimed that they did not prefer SRI since the government had not done enough to promote it.

#### 5.5.4. Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments

Investments involve some risk, which refers to the possibility of variation in the returns. The investors are requested to compare the perceived risks of socially responsible investments (SRI) with conventional investments. Investors' perception of SRI risk relative to traditional investing options are provided in Table 5.102

**Table 5.102**  
**Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments**

Variables	Frequency	Percentage
Very lower risk	21	3.7
Lower risk	99	17.6
Similar risk	286	50.7
Higher risk	141	25.0
Very higher risk	17	3.0
<b>Total</b>	<b>564</b>	<b>100.0</b>
<b>Mean</b>	<b>3.06</b>	
<b>Standard Deviation</b>	<b>0.83224</b>	

*Source: Primary data*

Table 5.102 outlines that half of the investors (50.7 per cent) perceive SRI as equally risky as conventional investments. This indicates that 286 investors believe the risks associated with conventional and social responsibility-themed investments are almost comparable. A significant percentage of investors (25 per cent) believe that SRI involves high risks compared to conventional investments, and only a slight percentage (3 per cent) believe that it involves very high risks. Only a small proportion of investors (3.7 per cent) believe that SRI is a very low-risk investing option. In contrast, a considerable proportion of investors (17.6 per cent) believe that SRI entails lesser risk.

The table also includes information on the mean and standard deviation; the mean value of 3.06 indicates that investors perceive SRI risk as high but not extremely high compared to conventional investment.

#### 5.5.4.1. Gender-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments

A gender-wise analysis is conducted on investors' perception of the risks associated with socially responsible investments as compared to conventional investments. The mean and standard deviation of the gender-wise comparison are highlighted in Table 5.103

**Table 5.103**  
**Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments- Gender-wise Comparison**

Gender	Mean	Std. Deviation
Male	3.0668	.83661
Female	3.0171	.81983
Others	3.2308	.83205
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

It is clear from Table 5.103 that the overall mean value (3.0603) indicates that investors perceive socially responsible investments as having high risk compared to conventional investments. The investors who fall under the others category perceive slightly higher risk in socially responsible investment than in conventional investment. It is also evident from the table that male investors perceive a slightly higher level of risk in SRI than female investors. The overall mean values and individual mean values range from 3.0171 to 3.2308, which shows that there is not much difference between perceptions of risk on SRI. It is also noted from the table that the average perception of male investors and overall perception are almost the same.

#### 5.5.4.2. Age-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments

Table 5.104 illustrates an age-wise analysis of investors' perception of the risks associated with socially responsible investments compared to conventional investments. The table describes the mean and standard deviation for each age group.

**Table 5.104****Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments - Age-wise Comparison**

<b>Age Group</b>	<b>Mean</b>	<b>Std. Deviation</b>
Up to 30 years	2.9506	.83172
30-60 Years	3.1429	.82665
Above 60 years	3.1667	.75277
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

Table 5.104 demonstrates that when age rises, there is a slight rise in the perception of risk on SRI. Risk perception is generally lower for those under 30 years old, with a mean value of 2.9506, followed by those in the 30 to 60-year age range, with a mean value of 3.1429, and slightly higher for those over 60 years old, with a mean value of 3.1667. With an overall mean value of 3.0603, investors consider SRI riskier than conventional funds.

**5.5.4.3. Education-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments**

The educational-group-wise analysis of the perception of the risk associated with SRI compared to conventional funds is displayed in Table 5.105.

**Table 5.105****Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments - Education-wise Comparison**

<b>Educational Qualification</b>	<b>Mean</b>	<b>Std. Deviation</b>
Below SSLC	2.6250	1.30247
SSLC	3.1143	.75815
Plus Two	3.1579	.78232
Graduation	3.0514	.87863
Post-Graduation	3.0000	.81650
Others	3.1481	.66238
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*



Table 5.105 makes it evident that investors with education levels below the SSLC have the lowest level of risk perception compared to other educational groups with a mean value of 2.6250, followed by investors with post-graduation as their highest qualification with a mean value of 3.00. With a mean value of 3.1579, investors with Plus Two qualification have the highest level of risk perception. It is clear from the table that investors with different educational backgrounds have varying mean scores, which indicate varying levels of perceived risk, but the variations are not significant.

#### **5.5.4.4. Occupation-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments**

Table 5.106 compares perceptions of risk associated with SRI investments versus conventional funds by occupation.

**Table 5.106**  
**Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments - Occupation-wise Comparison**

<b>Occupation</b>	<b>Mean</b>	<b>Std. Deviation</b>
Business	3.0132	.85625
Profession	3.0930	.80469
Government Employee	3.1238	.85142
Private Employee	3.0143	.85548
Retired	3.1250	.64087
Others	3.1111	.74748
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

It is worth noting from Table 5.106 that retired investors and government employees have slightly higher levels of perceived risk on SRI compared to conventional investments, with mean values of 3.1250 and 3.1238, respectively. The risk perception is low for investors engaged in the profession with a mean score of 3.0143. The data reveals that the total perceived risk with a mean value of 3.0603 indicates a high but not extremely high perception of risk.

#### 5.5.4.5. Marital Status-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments

Depending on marital status, investors' perception of the risk associated with socially responsible investment versus conventional investments is highlighted in Table 5.107.

**Table 5.107**  
**Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments -Marital Status-wise Comparison**

Marital Status	Mean	Std. Deviation
Single	2.9845	.85459
Married	3.0907	.81377
Widowed	3.5000	.84984
Separated	3.0000	1.00000
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

It is clear from Table 5.107 that there is some variation in the perceptions of risk related to socially responsible investments compared to conventional investments between marital status groups with widowed investors reporting the highest perceived risk on SRI with a mean value of 3.5. This entails that widowed investors believe SRI will be riskier than other investment options. With a mean value of 2.9845, single investors have a lower perceived risk on SRI than conventional investments. The results show that the individual mean scores and the combined mean across all married status categories range between 2.9845 and 3.5000. This suggests that investors across all marital status categories view SRI as moderate to riskier than traditional investment.

#### 5.5.4.5. Average Annual Income-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments

Table 5.108 compares investors' perceptions of the risk involved with socially responsible investments to traditional investments based on average annual income.

**Table 5.108**

**Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments -Average Annual Income-wise Comparison**

<b>Average annual income</b>	<b>Mean</b>	<b>Std. Deviation</b>
Below Rupees 250000	3.0266	.84924
250001-500000	3.0645	.81923
500001-750000	2.9559	.76165
750001-1000000	3.1061	.93032
Above 1000000	3.1724	.79544
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

Table 5.108 highlights that investors from different income groups have slightly varied mean scores for SRI risk perception, indicating different levels of perceived risk. The total mean score is 3.0603, which indicates a high but not a very high level of perceived risk on SRI compared to traditional investment alternatives. However, there are some differences between the mean SRI risk perception scores for the different income categories. The highest mean score, 3.1724, is found for the investors with an average annual income above Rs.1000000, followed by investors falling under the Rs 750001-Rs 1000000 income group with a mean score of 3.1061. The lowest mean score, 2.9559, is found for the investors with an average annual income of Rs 500001 to Rs 750,000. The overall data shows that investors of all income levels believe SRI to be moderately to highly riskier than conventional investment.

**5.5.4.5. Experience-wise Investors' Perception on the Risks Related to Socially Responsible Investments as Compared to Conventional Investments**

Table 5.109 displays data on how investors perceive the level of risk associated with socially responsible investments compared to conventional investments, based on their experience in the stock market operation.

**Table 5.109**

**Perception of Risk Related to Socially Responsible Investments Compared to Conventional Investments Experience-wise Comparison**

<b>Experience in Stock Market Operation</b>	<b>Mean</b>	<b>Std. Deviation</b>
Below one year	2.9621	.85073
1-3 years	3.0189	.79930
3-5 years	3.1355	.86848
5-10 years	3.1250	.77119
Above 10 years	3.1364	.94089
<b>Total</b>	<b>3.0603</b>	<b>.83224</b>

*Source: Primary data*

Table 5.109 reveals that investors with different years of experience in the stock market operation perceive socially responsible investments (SRI) differently regarding risk. There are slight variations in the level of risk perceived by investors across different experience categories. With a mean value of 3.0603, the combined perception score denotes a high but not extremely high perception of risk. The highest mean score, 3.1364, was obtained by investors with more than ten years of experience in stock market operations, showing a considerably higher level of perceived risk on SRI, immediately followed by investors having 3 to 5 years of experience with a mean score of 3.1355. The lowest mean score, 2.9621, is found for investors with less than a year of experience. The overall results suggest that SRI is perceived as moderately to highly riskier than traditional investments by investors of all experience categories.

**5.5.5. Investors' Interest in Different Types of Investments**

The preference of a particular company or industry is different for different investors. Socially responsible investors avoid investing in sin stocks, industries, or sectors. They exclude investments in alcohol, tobacco, arms industries, nuclear businesses, gambling operations, animal testing, genetically modified food, and other similar industries. To study the perception of investors towards socially responsible investments, their attitudes towards investing in these industries should also be examined. The investors' interests in various sin stocks or sectors are gathered using a five-point scale and presented below.

### 5.5.5.1. Investors' Interest in Investment in the Alcohol Industry

The level of investor interest in the Alcohol industry is demonstrated in Table 5.110. The data was collected on a five-point scale ranging from extremely interested to not at all interested. The frequency and percentage are exhibited in the table below.

**Table 5.110**  
**Investors' Interest in Investment in the Alcohol Industry**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	25	4.4
Very interested	36	6.4
Moderately interested	84	14.9
Slightly interested	63	11.2
Not at all interested	356	63.1
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.110 reveals that a significant percentage of investors, 63.1 per cent are not at all interested in investing in the alcohol industry and only 11 per cent are slightly interested in the alcohol industry. 14.9 per cent of investors are moderately interested in the alcohol industry. In contrast, the percentages of extremely interested and very interested investors are limited with to 4.4 per cent and 6.4 per cent respectively. This suggests that most investors are not interested in investing in the alcohol industry. However, there is a considerable number of investors show some interest in this industry.

### 5.5.5.2. Investors' Interest in Investment in the Tobacco Industry

Table 5.111 illustrates the degree of investor interest in the Tobacco industry.

**Table 5.111**  
**Investors' Interest in Investment in the Tobacco Industry**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	-	-
Very interested	12	2.1
Moderately interested	34	6.0
Slightly interested	54	9.6
Not at all interested	464	82.3
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It is significant to note from Table 5.111 that none of the investors is extremely interested in investing in the tobacco industry, and only a minute percentage, 2.1 per cent, stated that they were very much interested in the tobacco industry. The percentage of moderately and slightly interested investors was also less with 6 per cent and 9.6 per cent respectively. It is evident from the table that the majority of the investors, 82.3 per cent were not at all interested in the tobacco industry. The overall results indicate that investor interest in the tobacco industry is relatively low, with a large majority of the investors expressing no interest in this industry. This may be due to the health issues caused by the use of tobacco and the increased public awareness of the negative aspects of tobacco.

### 5.5.5.3. Investors' Interest in Investment in an Industry or Company that Abuses Animals

Table 5.112 exhibits the degree to which investors are interested in investing in an industry or company that exploits or abuses animals.

**Table 5.112**  
**Investors' Interest in Investment in an Industry or Company that Abuses Animals**

Variables	Frequency	Percentage
Extremely interested	28	5.0
Very interested	18	3.2
Moderately interested	60	10.6
Slightly interested	97	17.2
Not at all interested	361	64.0
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Of the total, a significant percentage, 64 per cent of investors opined that they were not interested in an industry or firm that abuses animals. Only 17.2 per cent of investors stated that they were slightly interested in firms or industries exploiting animals. It is also evident from the table that only a small proportion of investors were extremely and very much interested in industries abusing animals, with 5 per cent and 3.2 per cent, respectively. The percentage of moderately interested investors is also comparatively low at 10.6 per cent. The results indicate that many investors hesitate to invest in firms abusing animals.

#### 5.5.5.4. Investors' Interest in Investment in an Industry or Company that Genetically Modify Food

Table 5.113 narrates the interest of investors in a company or industry that genetically modifies food.

**Table 5.113**  
**Investors' Interest in Investment in an Industry or Company that Genetically Modify Food**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	17	3.0
Very interested	55	9.8
Moderately interested	133	23.6
Slightly interested	93	16.5
Not at all interested	266	47.2
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.113 exhibits that more than half of investors have some interest in businesses or industries that produce genetically modified food, with 3 per cent expressing extreme interest, 9.8 per cent expressing strong interest, 23.6 per cent expressing moderate interest and 16.5 per cent expressing minimal interest. The table suggests that a significant percentage of investors, 47.2 per cent, were not interested in a firm or industries that genetically modify food.



### 5.5.5.5. Investors' Interest in Investment in the Arms Industry

Table 5.114 presents the level of interest of investors in the arms industry.

**Table 5.114**  
**Investors' Interest in Investment in the Arms Industry**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	60	10.6
Very interested	78	13.8
Moderately interested	107	19.0
Slightly interested	104	18.4
Not at all interested	215	38.1
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.114 reported that the majority of the investors disclosed that they were interested in investing in the arms industry, with 10.6 per cent expressing extreme interest, 13.8 per cent expressing intense interest, 19 per cent expressing moderate interest and 18.4 per cent expressing minimal interest in the arms industry. However, a sizable proportion, 38.1 per cent, of investors are reluctant to invest in the arms industry. The overall results indicate that more than half of the investors favour the arms industry.

### 5.5.5.6. Investors' Interest in Investment in Pesticides/Chemicals Industry/Company

Table 5.115 shows the interest of investors in companies or industries related to pesticides or chemicals.

**Table 5.115**  
**Investors' Interest in Investment in Pesticides/Chemicals Industry/Company**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	17	3.0
Very interested	21	3.7
Moderately interested	55	9.8
Slightly interested	72	12.8
Not at all interested	399	70.7
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.115 illustrates that the majority of the investors (70.7 per cent) are not interested in investing in pesticides and chemicals. However, only 29.3 per cent of investors expressed some sort of interest in the pesticides/chemical industry, with 3 per cent expressing extreme interest, 3.7 per cent expressing intense interest, 9.8 per cent expressing moderate interest and 12.8 per cent expressing minute interest. This indicates that the investors are not interested in pesticides and chemicals firms and industries, with a minute percentage showing extreme and intense interest in them. This may be due to the growing concern for the health issues and environmental pollution caused by these sectors.

### 5.5.5.7. Investors' Interest in Investment in an Industry/Company that may be involved in the Production of Pornography or Violent Material

Table 5.116 illustrates investors' interest in investing in businesses that may produce pornographic or violent content.

**Table 5.116**  
**Investors' Interest in Investment in an Industry/Company that may be involved in the Production of Pornography or Violent Material**

Variables	Frequency	Percentage
Extremely interested	4	.7
Very interested	-	-
Moderately interested	4	.7
Slightly interested	2	.4
Not at all interested	554	98.2
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

It is important to note from the table that a large majority of investors, 98.2 per cent reported their unwillingness to invest in an industry or company that may involve the production of pornography or violent material. In contrast, only a minute percentage of investors expressed willingness towards this sector, with 0.7 per cent expressing extreme and moderate interest, followed by 0.4 per cent expressing minimal interest. This result implies that investors are hesitant to invest in an industry or company that may involve the production of pornography or violent material. This might be due to moral or ethical concerns or legal or social reasons.

### 5.5.5.8. Investors' Interest in Investment in Nuclear Power Generation

Table 5.117 portrays the degree of interest among investors in nuclear power generation.

**Table 5.117**

#### **Investors' Interest in Investment in Nuclear Power Generation**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Extremely interested	55	9.8
Very interested	64	11.3
Moderately interested	137	24.3
Slightly interested	102	18.1
Not at all interested	206	36.5
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

According to Table 5.117, the majority of the investors (63.5 per cent) opined their interest in investment in nuclear power generation. A sizable proportion of investors (24.3 per cent) expressed moderate interest, 18.1 per cent expressed minimal interest, 11.3 per cent showed intense interest, and 9.8 per cent showed extreme interest. However, only 36.5 per cent of investors expressed their non-willingness to invest in nuclear power generation projects. This implies that a significant portion of investors are not against nuclear power generation.

### 5.5.6. Actions Taken by the Investors if the Current Company they have invested in is found to be Socially Irresponsible

The investors were asked about the action they would take if they became aware that the company they had invested in was behaving socially irresponsibly. The data was collected using a five-point scale, and the frequency and percentage of actions taken by investors are presented below.

#### 5.5.6.1. Will Not Bother and Continue with the Investment

Table 5.118 displays the frequency and percentage of investors who would not be bothered and would continue with their investment if they discovered that the company they had invested in was behaving in a socially irresponsible manner.

**Table 5.118**  
**Will Not Bother and Continue with the Investment**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly Disagree	177	31.4
Disagree	121	21.5
Neither agree nor disagree	164	29.1
Agree	52	9.2
Strongly Agree	50	8.9
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.118 states that a significant percentage (31.4 per cent) of the respondents strongly oppose holding their shares in a socially irresponsible company, and 21.5 per cent disagree with this statement. On the other hand, a sizeable number of investors (29.1 per cent) are unsure whether they would continue with the investment. The data also indicated that a small percentage of investors will continue to support investments in socially irresponsible firms.

Overall the results suggest that more than half of the investors stated their disagreement with the unethical firm. This shows the growing importance of

corporate social responsibility and increased investor concern on corporate social performance.

### 5.5.6.2. Will Withdraw Money from the Investment

Table 5.119 shows the frequency and percentage of investors who would withdraw their money or divest from their investment if they discovered that the company they had invested in was behaving in a socially irresponsible manner.

**Table 5.119**  
**Will Withdraw Money from the Investment**

Variables	Frequency	Percentage
Strongly Disagree	56	9.9
Disagree	82	14.5
Neither agree nor disagree	159	28.2
Agree	122	21.6
Strongly Agree	145	25.7
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.119 depicts that a significant percentage (25.7 per cent) of the investors strongly agree that they will withdraw their money from their stock when the company is found to be socially irresponsible and 21.6 per cent of the investors agree. A considerable proportion (28.2 per cent) of investors is undecided about whether they divest from an unethical firm. It is also evident from the table that around 24.4 per cent of the investors stated that they would not sell their shares from an unethical firm and continue with the investment. The overall data suggests that a sizable portion of investors would be willing to sell their investment if they realise the social harms caused by the company. This may highlight investors' increased preference for corporate social responsibility.

### 5.5.6.3. Will Recommend Others Not to Invest in the Company

Table 5.120 exhibits information on the frequency and percentage of investors who would advise others not to invest in the company if they discovered that the

company they had already invested in was engaging in socially irresponsible behaviour.

**Table 5.120**  
**Will Recommend Others Not to Invest in the Company**

Variables	Frequency	Percentage
Strongly Disagree	69	12.2
Disagree	61	10.8
Neither agree nor disagree	179	31.7
Agree	135	23.9
Strongly Agree	120	21.3
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.120 illustrates that a sizable percentage (23.9 per cent) of the investors strongly agree that they would recommend others not to invest in the socially irresponsible firm, and 21.3 per cent of the investors agree. 31.7 per cent of investors stated that they are undetermined whether or not to advise others to invest in a company that follows socially irresponsible business practices. Recommending the people to avoid investing in a company that practices social irresponsibility is opposed by the remaining group of investors. Overall, the results suggest that a significant portion (45.2 per cent) of investors would consider recommending others to not invest in a socially irresponsible company. In contrast, a significant portion is unsure or disagrees with this idea

#### **5.5.6.4. Will Use the Right as a Shareholder and Take Actions to Correct the Company**

Table 5.121 shows the data on the number and percentage of investors who would exercise their shareholder rights to correct the socially irresponsible behaviour of the company they had invested in.

**Table 5.121****Will Use the Right as a Shareholder and Take Actions to Correct the Company**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly Disagree	77	13.7
Disagree	67	11.9
Neither agree nor disagree	192	34.0
Agree	146	25.9
Strongly Agree	82	14.5
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Of the total, a considerable percentage (25.9 per cent) of the survey participants agree with the possibility of taking corrective action against the socially irresponsible behaviour of their invested company and 14.5 per cent of the participants strongly agree with the same. A sizable portion of investors (34 per cent) claimed that they are undecided about whether they will exercise their right to object to the socially irresponsible actions of the firm they had invested in. It is also clear from the table that 13.7 per cent strongly disagree with the possibility of taking corrective action against the socially irresponsible behaviour of their invested company and 11.9 per cent disagree with the same. This might be for a various reason, including the fact that the investors may not have enough time, money or competence to use their rights as shareholders rights to correct the socially irresponsible behaviour of the company they had invested in.



### 5.5.6.5. Will Take Legal Action against the Company

Table 5.122 exhibits information on the number and proportion of investors who would take legal action against the company if they discovered that the company they had invested in was acting in a socially irresponsible manner.

**Table 5.122**  
**Will Take Legal Action against the Company**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly Disagree	141	25.0
Disagree	69	12.2
Neither agree nor disagree	222	39.4
Agree	49	8.7
Strongly Agree	83	14.7
<b>Total</b>	<b>564</b>	<b>100.0</b>

*Source: Primary data*

Table 5.122 clearly shows that 83 investors strongly agree that they will take legal action against the unethical firm, followed by 49 investors who agree with the idea of taking legal action. A significant percentage of investors (39.4 per cent) say they are unsure whether they support or oppose the idea of taking legal action. A considerable proportion of investors strongly disagree with the idea of taking legal action against the unethical firm they had invested in, followed by 12.2 per cent disagreeing with the idea.

### 5.5.7. Methods of Trading Strategy Preferred

Socially responsible investment (SRI) involves the inclusion of best-in-class companies or sectors and firms that exhibit commendable socially responsible behaviours. SRI can also be implemented by excluding sin industries and companies against social or ethical behaviour from the investment portfolio. There are several approaches to socially responsible investment. It is important to explore the preference for different strategies by the investors. The following Table 5.123 presents the preference and non-preference of SRI strategies by the investors.

**Table 5.123**  
**Methods of Trading Strategy Preferred**

Methods	Preferred		Not Preferred	
	Frequency	Percentage	Frequency	Percentage
Negative screening	301	53.4	263	46.6
Positive screening	369	65.4	195	34.6
Best-in-class	301	53.4	263	46.6
Ethical Exclusion	179	31.7	385	68.3
Norm based screening	181	32.1	383	67.9
Thematic investment	228	40.4	336	59.6
Integration	206	36.5	358	63.5

*Source: Primary data*

Table 5.123 reports the most and least favoured trading strategies used by investors while making socially responsible investments. The table clearly shows that positive screening is the most preferred trading strategy above all other strategies, with 65.4 per cent of the investors stating a preference for it. The second most preferred methods are negative screening and best-in-class screening with 53.4 per cent of investors expressing a preference for these strategies. Additionally, 40.4 per cent of investors indicated a preference for thematic investment, followed by integration with 36.5 per cent preference. The preferences for other strategies are less, with ethical exclusion being the least preferred strategy.

## **5.6. Behavioural Intention towards Socially Responsible Investment**

In this study, the third objective was to understand the behavioural intention of stock market investors in Kerala towards socially responsible investment. To achieve this, data was collected from investors using a five-point scale rating from 'strongly agree' to 'strongly disagree'. The behavioural intention toward socially responsible investment was studied by extending the Theory of Planned Behaviour (TPB) propounded by Icek Ajzen (1985, 1991). The constructs of TPB, such as Attitude, Subjective norms, Perceived behavioural control, and behavioural Intention, were used in the measurement scale. Additionally, environmental factors, social factors, corporate governance factors and financial performance constructs were added to the measurement model. The study used a widely accepted reporting style of partial least

squares structural equation modeling (PLS-SEM) for representing the relationship between different constructs.

### **5.6.1. Partial Least Squares SEM (PLS-SEM)**

The two most popular methods of structural equation modeling (SEM) are covariance-based SEM (CB-SEM) and partial least squares SEM (PLS-SEM). PLS-SEM is also known as PLS path modeling. CB-SEM (covariance-based structural equation modeling) was the most widely used analysis method for studying interrelationships between variables until 2015. Afterwards, the authors started to use the PLS-SEM (partial least squares SEM) method for examining complex interrelationships between variables. Now, it is a widely accepted tool for social science research (Hair et al., 2018). PLS is a Variance Based SEM Model and it is developed as a 'causal-predictive' model to SEM and it explains the variance that may occur on the dependent variable of a model. The most important peculiarities of PLS-SEM are that it is more suitable with small sample sizes, deals with complex reflective and formative models and does not require normality assumption of the distribution; therefore, it is a non-parametric method of structural equation modeling (SEM). Thus PLS-SEM is suitable for a wide variety of disciplines. In case of a large sample size, PLS-SEM delivers more precise results. Thus, it is suitable for both large and small sample sizes and suitable for analyzing both ordinary and metric data (Hair et al., 2021).

PLS-SEM uses two processes to test a model's theoretical relationships: first, the measurement model's reliability and validity are evaluated, and then the structural model is examined (Hair et al., 2019).

### **5.6.2. Influence of different constructs on Behavioural Intention to invest in Socially Responsible Investment**

Many factors may influence the intention to invest in a social responsibility-themed investment. The following are the proposed hypotheses:

H1: There is a significant positive influence of attitude towards SRI on behavioural intention to invest in SRI

H2: There is a significant positive influence of subjective norms on behavioural intention to invest in SRI

H3: There is a significant positive influence of perceived behavioural control on behavioural intention to invest in SRI

H4: There is a significant positive influence of environmental factors on behavioural intention to invest in SRI

H5: There is a significant positive influence of social factors on behavioural intention to invest in SRI

H6: There is a significant positive influence of corporate governance factors on behavioural intention to invest in SRI

H7: There is a significant positive influence of financial performance on behavioural intention to invest in SRI

### **5.6.3. Evaluating Measurement Model and Structural Model Using Partial Least Square**

The behavioural intention of stock market investors in Kerala towards socially responsible investment is studied by extending the Theory of Planned Behaviour. The study follows the widely accepted reporting style of PLS-SEM also known as PLS path modeling. PLS-SEM is suitable for predicting constructs and their explanation and is widely used in exploration studies. PLS-SEM is useful for both large and small-sample size studies and can be employed when the distribution is not normal. The PLS-SEM does not require continuous data or specific assumptions on the distribution of data or multi-normality (Hair et al., 2021). In this study, the normality assumption is not satisfied; hence, the PLS-SEM is used to evaluate the measurement and structural model. First, the validity and reliability of the measurement model are assessed, and then the structural model is validated. Smart PLS4 is used to assess the measurement model and structural model.

### 5.6.3.1. Measurement Model Assessment- Model Fit of the TPB Model

The measurement model assessment includes measuring the indicators, their reliability and validity.

#### 5.6.3.1.1. Factor Loading of the Measurement model

Factor loading or indicator loading depicts how well a variable or factor represents the underlying construct. It is the bivariate correlation between a construct and the variables or indicators, and it is the absolute contribution of a variable to its underlying construct. Factor loadings are advised to be of a value above 0.50 (Hair et al., 2016), and a factor loading less than 0.40 should be eliminated (Hair et al., 2022). In this study, two items were found to have a factor loading with a value less than 0.50 (Fin5 and Fin7). Hence, they were removed as their removal was also found to be a reason for improving the AVE (average variance extracted) of the model. Factor loadings are shown in Table 5.124.

**Table 5.124**  
**Factor Loading of the Measurement Model**

	Att	Cor	Env	Fin	Per	Soc	Sub	Int
Att1	0.908							
Att2	0.908							
Att3	0.833							
Att4	0.869							
Att5	0.903							
Cor1		0.611						
Cor2		0.888						
Cor3		0.923						
Cor4		0.898						
Cor5		0.893						
Cor6		0.693						
Cor7		0.885						
Cor8		0.923						
Env1			0.706					
Env2			0.802					

Env3			0.764					
Env4			0.779					
Env5			0.77					
Env6			0.762					
Env7			0.565					
Env8			0.804					
Env9			0.789					
Fin1				0.448				
Fin2				0.932				
Fin3				0.934				
Fin4				0.59				
Fin6				0.628				
Per1					0.88			
Per2					0.856			
Per3					0.918			
Per4					0.45			
Soc1						0.843		
Soc2						0.901		
Soc3						0.858		
Soc4						0.897		
Soc5						0.877		
Soc6						0.863		
Sub1							0.911	
Sub2							0.919	
Sub3							0.912	
Sub4							0.715	
Int1								0.824
Int2								0.908
Int3								0.912
Int4								0.936
Int5								0.84

*Source: Developed for the research*

### 5.6.3.1.2. Reliability Analysis of the Measurement model

The reliability of a measurement model refers to its consistency. A measurement scale is reliable when data from the same respondents under similar conditions give the same results. The reliability is established using Cronbach Alpha and Composite Reliability (CR). The Cronbach Alpha is a traditional measure of reliability and a conservative approach to reliability whereas Composite Reliability is a modern measure of reliability and a more liberal approach to reliability (Hair et al., 2016). The required thresholds for these indicators are 0.70 (Hair et al., 2011). The Cronbach's Alpha for the constructs in this study ranged from 0.77 to 0.94, and Composite Reliability statistics ranged from 0.84 to 0.95. Hence construct reliability is established.

**Table 5.125**  
**Construct Reliability Analysis**

<b>Constructs</b>	<b>Cronbach's alpha</b>	<b>Composite Reliability</b>
Attitude	0.930	0.947
Env_Factors	0.902	0.921
Fin_Factors	0.779	0.843
Per_BC	0.790	0.869
Social_factors	0.939	0.951
Sub_Norms	0.889	0.924
corporate_gov	0.940	0.952
Behavioural Intention	0.930	0.947

*Source: Developed for the research*

### 5.6.3.1.3. Validation of the Measurement model

Validity refers to the accuracy of the measurement model. Construct validity is the statistical validity of the model and is established when there is convergent validity and discriminant validity.

#### 5.6.3.1.3.1. Convergent validity

Convergent validity refers to factors converging to represent the underlying construct. The AVE (average variance extracted) is used to measure the convergent validity of the construct. When the AVE value is greater than or equal to the recommended value of 0.50, items converge to measure the underlying construct and establish convergent validity (Fornell & Larcker, 1981). The statistics show that all the constructs have an AVE value greater than 0.5, establishing convergent validity (Hair et al., 2022).

**Table 5.126**  
**Convergent Validity of the Constructs**

<b>Constructs</b>	<b>Average Variance Extracted (AVE)</b>
Attitude	0.783
Env_Factors	0.566
Fin_Factors	0.537
Per_BC	0.638
Social_factors	0.763
Sub_Norms	0.754
corporate_gov	0.717
Intention	0.783

*Source: Developed for the research*

#### 5.6.3.1.3.2. Discriminant Validity

Discriminant validity establishes the distinctiveness of the construct or the individuality or individual identity of the construct. In this study, the discriminant validity is measured using the two most widely used methods, namely the Fornell & Larcker criterion and HTMT (Heterotrait–Monotrait Ratio).

##### 5.6.3.1.3.2.a. Fornell & Larcker Criterion

According to Fornell and Larcker (1981) criterion, discriminant validity is established when the square root of the AVE of a construct is greater than its correlation with all other constructs. In this study it was found to be established.



**Table 5.127**  
**Fornell & Larcker Criterion**

	<b>Attitude</b>	<b>Env_Factors</b>	<b>Fin_Factors</b>	<b>Intention</b>	<b>Per_BC</b>	<b>Social_factor s</b>	<b>Sub_Norms</b>	<b>corporate_gov</b>
Attitude	<b>0.885</b>							
Env_Factors	0.586	<b>0.752</b>						
Fin_Factors	0.558	0.650	<b>0.733</b>					
Intention	0.600	0.667	0.683	<b>0.885</b>				
Per_BC	0.468	0.518	0.469	0.422	<b>0.799</b>			
Social_factors	0.521	0.666	0.583	0.554	0.303	<b>0.873</b>		
Sub_Norms	0.705	0.639	0.574	0.555	0.595	0.441	<b>0.868</b>	
corporate_gov	0.425	0.529	0.565	0.483	0.265	0.768	0.296	<b>0.846</b>

*Source: Developed for the research*

Note: Bold represents the square root of AVE

**5.6.3.1.3.2.b. HTMT (Heterotrait–Monotrait Ratio)**

Discriminant validity is also established using the HTMT ratio when the values of correlations are below the threshold of 0.85 (Henseler et al., 2015). This study confirms the validity as shown in Table 5.128

**Table 5.128**  
**HTMT Ratio**

	<b>Attitude</b>	<b>Env_Factors</b>	<b>Fin_Factors</b>	<b>Intention</b>	<b>Per_BC</b>	<b>Social_factors</b>	<b>Sub_Norms</b>	<b>cor_gov</b>
Attitude								
Env_Factors	0.640							
Fin_Factors	0.593	0.719						
Intention	0.644	0.723	0.746					
Per_BC	0.534	0.619	0.559	0.484				
Social_factors	0.550	0.725	0.690	0.580	0.355			
Sub_Norms	0.761	0.709	0.608	0.606	0.738	0.459		
corporate_gov	0.446	0.576	0.728	0.505	0.299	0.824	0.301	

*Source: Developed for the research*

#### 5.6.3.1.4. Common Method Bias

Harman's single-factor test measures common method variance (CMV). After conducting factor analysis on the questionnaire items, it was found that the loading of the first principal component acquired before rotation was 39.9%, indicating that it did not explain most of the total variance (>50%), and thus, there is no concern of common method bias in this study.

**Table 5.129**  
**Common Method Bias**

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %			
1	19.164	39.926	39.926	19.164	39.926	39.926
2	6.300	13.125	53.050			
3	2.249	4.685	57.735			
4	2.073	4.319	62.055			
5	1.882	3.920	65.975			
6	1.500	3.124	69.099			
7	1.218	2.537	71.636			
8	1.136	2.367	74.003			
9	0.943	1.966	75.969			
10	0.851	1.772	77.741			
11	0.796	1.659	79.399			
12	0.706	1.470	80.870			
13	0.656	1.367	82.236			
14	0.606	1.263	83.499			
15	0.560	1.168	84.667			
16	0.506	1.055	85.722			
17	0.489	1.019	86.742			
18	0.475	0.989	87.730			

19	0.413	0.860	88.591			
20	0.400	0.833	89.424			
21	0.377	0.785	90.210			
22	0.363	0.757	90.966			
23	0.331	0.690	91.657			
24	0.314	0.654	92.311			
25	0.306	0.637	92.948			
26	0.301	0.627	93.576			
27	0.269	0.560	94.135			
28	0.258	0.538	94.674			
29	0.245	0.510	95.184			
30	0.229	0.478	95.661			
31	0.216	0.450	96.112			
32	0.209	0.436	96.547			
33	0.198	0.413	96.961			
34	0.189	0.394	97.354			
35	0.175	0.365	97.719			
36	0.166	0.347	98.066			
37	0.145	0.303	98.368			
38	0.137	0.285	98.653			
39	0.129	0.269	98.922			
40	0.119	0.248	99.170			
41	0.110	0.229	99.398			
42	0.072	0.151	99.549			
43	0.063	0.131	99.680			
44	0.055	0.114	99.794			
45	0.043	0.089	99.883			
46	0.025	0.053	99.936			
47	0.018	0.037	99.974			
48	0.013	0.026	100.000			

*Source: Developed for the research*

### **5.6.3.2. Structural Model**

The structural model is the analysis of the results of the relationship among the constructs. In this section the structural model aims to test the formulated hypotheses for the direct relationship between (i) attitude, (ii) subjective norms, (iii) perceived behavioural control (iv) environmental factors, (v) social factors, (vi) corporate governance factors and (vii) financial performance with the behavioural intention to invest in socially responsible investment (SRI).

The validation of the structural model is established through the coefficient of determination ( $R^2$ ) and path coefficients.

#### **5.6.3.2.1. Coefficient of Determination ( $R^2$ ):**

The structural model is evaluated by using the value of  $R^2$ . The coefficient of determination ( $R^2$ ) value indicates the amount of variance in a dependent variable that is explained by the independent variables. The analysis shows that 58.3 per cent variance in the dependent variable 'behavioural intention' is explained by the independent variables in this study.

#### **5.6.3.2.2. Predictive Value ( $Q^2$ )**

Predictive value ( $Q^2$ ) measures whether a model has predictive relevance or not. When the  $Q^2$  value is greater than zero, then it is said that the values are well reconstructed and the model has predictive relevance. In this study, the  $Q^2$  value is 0.566; this shows that there is good predictive relevance to this model and indicates a highly predictive model.

#### **5.6.3.2.3. Path Coefficients:**

In SEM, the interrelationships between the variables are visually presented by using path models. Path models are used for evaluating the theoretical relationship between the variables and these path models are established based on theory (Hair et al., 2021).

The path coefficient in PLS-SEM is measured by the beta value. It assesses the weight of impact or measures how strongly one variable influences another. The beta value above 0.20 means significant.

### 5.6.3.2.3.a. Testing of Hypotheses: Direct Path Model

Table 5.130 presents the results of the hypothesized relationship between various constructs and the behavioural intention of the proposed conceptual model of the study.

**Table 5.130**  
**Hypotheses Results**

<b>Hypotheses</b>	<b>Original sample (O)</b>	<b>Sample mean (M)</b>	<b>Standard deviation (STDEV)</b>	<b>T statistics</b>	<b>P values</b>	<b>Decision</b>
H1:Attitude -> Behavioural Intention	0.209	0.206	0.051	4.122	0.000	Supported
H2:Sub_Norms -> Behavioural Intention	0.011	0.011	0.053	0.206	0.418	Rejected
H3:Per_BC -> Behavioural Intention	-0.007	-0.005	0.044	0.151	0.440	Rejected
H4:Env_Factors -> Behavioural Intention	0.278	0.278	0.050	5.524	0.000	Supported
H5:Social_factors -> Behavioural Intention	0.041	0.04	0.063	0.653	0.257	Rejected
H6:Corporate_gov -> Behavioural Intention	0.017	0.020	0.055	0.314	0.377	Rejected
H7:Fin_Factors -> Behavioural Intention	0.348	0.350	0.049	7.066	0.000	Supported

*Source: Developed for the research*

The results of hypothesized relationship between various constructs and behavioural intention are described below:

#### 5.6.3.2.3.1.a) Attitude -> Behavioural Intention

**H<sub>10</sub>**: There is no significant positive influence of attitude on behavioural intention to invest in SRI

**H<sub>11</sub>**: There is a significant positive influence of attitude on behavioural intention to invest in SRI

H<sub>1</sub> evaluates whether attitude has a significant influence on the behavioural intention towards socially responsible investment. The results of Table 5.130 revealed that attitude has a significant and positive impact on behavioural intention to invest in SRI as the p-value (0.000) is less than 0.05. Hence, H<sub>1</sub> is accepted. The beta value is 0.209; this indicates that attitude has a positive influence on the intention to invest in SRI. Hence, H<sub>1</sub> is supported.

#### **5.6.3.2.3.1.b) Subjective Norms -> Behavioural Intention**

**H<sub>2</sub><sub>0</sub>**: There is no significant positive influence of subjective norms on behavioural intention to invest in SRI

**H<sub>2</sub><sub>1</sub>**: There is a significant positive influence of subjective norms on behavioural intention to invest in SRI

The influence of subjective norms on the intention towards socially responsible investment is assessed by H<sub>2</sub><sub>1</sub>. The results revealed that a subjective norm has an insignificant impact on behavioural intention to invest in SRI as the p-value is (0.418) more than 0.05 and the beta is 0.011. Hence, H<sub>2</sub><sub>1</sub> is not supported.

#### **5.6.3.2.3.1.c) Perceived Behavioural Control -> Behavioural Intention**

**H<sub>3</sub><sub>0</sub>**: There is no significant positive influence of perceived behavioural control on behavioural intention to invest in SRI

**H<sub>3</sub><sub>1</sub>**: There is a significant positive influence of perceived behavioural control on behavioural intention to invest in SRI

H<sub>3</sub><sub>1</sub> evaluates the influence of perceived behavioural control on behavioural intention to invest in SRI. The results revealed that perceived behavioural control has an insignificant impact on the intention, with a p-value of 0.440 and a beta of 0.007. The p-value is more than 0.05 and the beta is less than 0.20. Hence, H<sub>3</sub><sub>1</sub> is not supported.

#### **5.6.3.2.3.1.d) Environmental factors -> Behavioural Intention**

**H<sub>4</sub><sub>0</sub>**: There is no significant positive influence of environmental factors on behavioural intention to invest in SRI

**H4<sub>1</sub>**: There is a significant positive influence of environmental factors on behavioural intention to invest in SRI

H4<sub>1</sub> evaluates the impact of environmental factors on the intention toward socially responsible investment. H4<sub>1</sub> is supported as the results reveal that environmental factors have a significant and positive impact on intention to invest in SRI with a p-value (0.000) less than 0.05 and a beta of 0.278. Hence, H4<sub>1</sub> is supported.

#### **5.6.3.2.3.1.e) Social factors -> Behavioural Intention**

**H5<sub>0</sub>**: There is no significant positive influence of social factors on behavioural intention to invest in SRI

**H5<sub>1</sub>**: There is a significant positive influence of social factors on behavioural intention to invest in SRI

H5<sub>1</sub> evaluates the influence of social factors on the intention to invest in SRI and the results revealed that social factors have an insignificant impact on intention as the p-value (0.257) is more than 0.05 and the beta is 0.041. Hence, H5<sub>1</sub> is not supported.

#### **5.6.3.2.3.1.f) Corporate Governance factors -> Behavioural Intention**

**H6<sub>0</sub>**: There is no significant positive influence of corporate governance factors on behavioural intention to invest in SRI

**H6<sub>1</sub>**: There is significant positive influence of corporate governance factors on behavioural intention to invest in SRI

H6<sub>1</sub> evaluates the influence of corporate governance factors on the intention to invest in SRI, and the results revealed that corporate governance factors have an insignificant impact on behavioural intention to invest in SRI as the p-value (0.377) is more than 0.05 and the beta is 0.017. Hence, H6<sub>1</sub> is not supported.

#### **5.6.3.2.3.1.g) Financial Performance -> Behavioural Intention**

**H7<sub>0</sub>**: There is no significant positive influence of financial performance on behavioural intention to invest in SRI

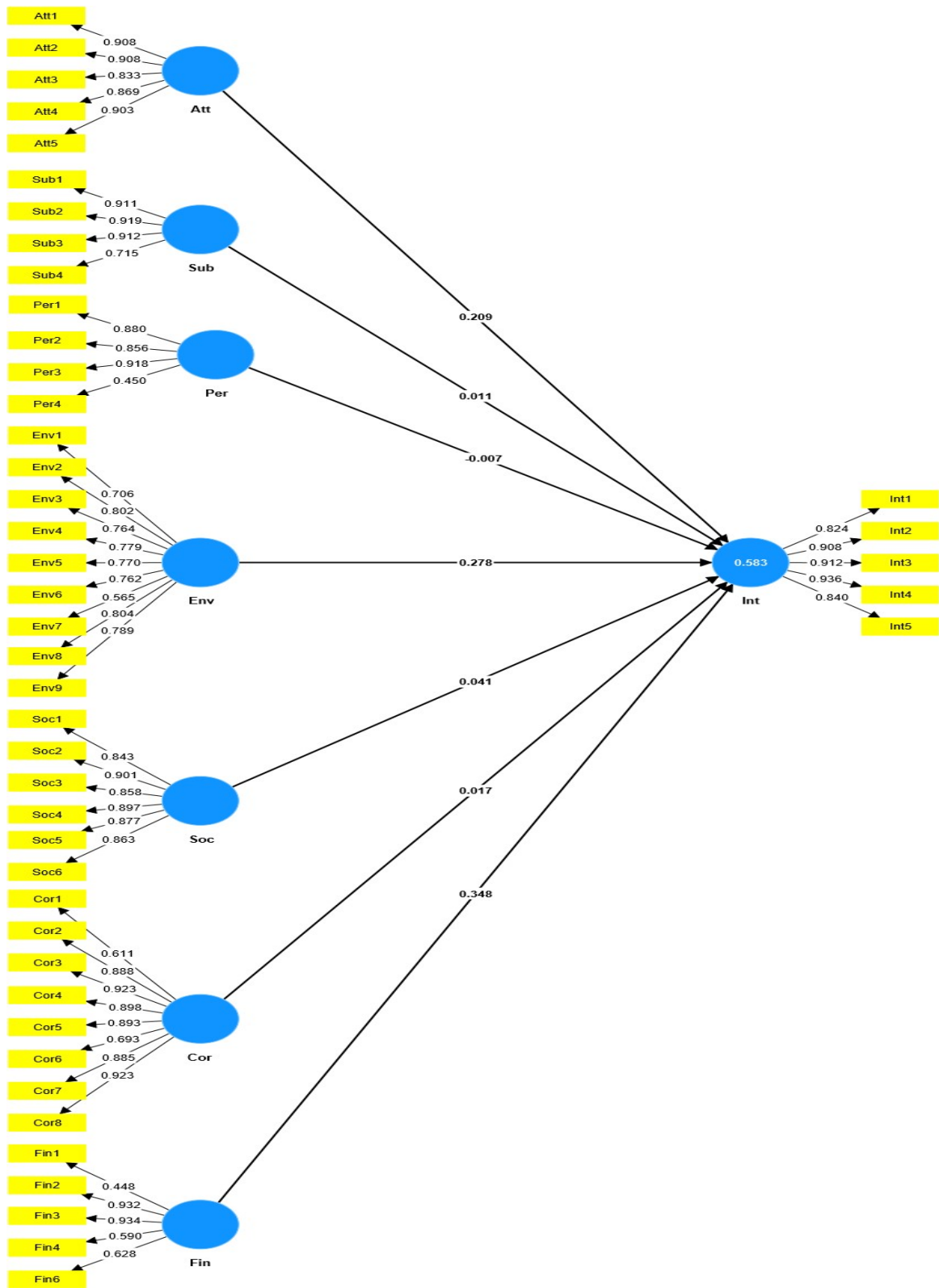
**H7<sub>1</sub>**: There is a significant positive influence of financial performance on behavioural intention to invest in SRI



The influence of financial factors on the intention towards socially responsible investment is assessed by H7<sub>1</sub>. The results reveal that financial factors have a significant and positive impact on behavioural intention to invest in SRI, with a beta of 0.348 and p-value (0.000) less than 0.05. Hence, H7<sub>1</sub> is supported.

The overall results revealed that H1<sub>1</sub>, H4<sub>1</sub> and H7<sub>1</sub> are supported, and hence attitude, environmental factors, and financial factors significantly and positively influence behavioural intention toward SRI. The other factors do not influence the intention to invest in SRI. The favourable attitude of investors towards SRI influences their intention to invest in SRI. Environmental factors such as companies' proper environmental management systems, producing environmentally friendly products and using environmentally friendly technologies, recycling policies, product innovation, and renewable energy sources influence investors. Additionally, companies' efforts to reduce pollution and carbon emissions influence investors positively. The reasonable performance and reasonable return of SRI influence investors' intention to invest in SRI. Financial performance is the most influential factor on intention to invest in SRI, with a beta value of 0.348, environmental factors with a beta value of 0.278 and attitude with a beta value of 0.209.

**Figure 5.1**  
**Structural model**



Source: Bootstrapping results of PLS Structural Equation Model

## References

- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control* (pp. 11–39). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Benny, V. (2021). A Study on Attitude of Women Investors towards Stock Market Investment in Kerala. *Anvesak*, 51(1), 114-121. <https://www.researchgate.net/publication/351547821>
- Chin, W. W. (2009). How to write up and report PLS analyses. In *Handbook of partial least squares: Concepts, methods and applications* (pp. 655-690). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Chin, W. W. (2010). How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. W.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- George, S. (2017). *Study on the Perception and Behaviour of Retail Investors towards Mutual Fund Investment: A Study among Mutual Fund Investors in Cochin* [Doctoral dissertation, Cochin University of Science and Technology].
- Hair Jr., J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-80519-7>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced issues in partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.)*. Thousand Oaks, CA: Sage.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jyothi, P.T. (2020). *Investor behaviour towards Capital Market in Kerala* [Doctoral dissertation, Madurai Kamaraj University]. <http://hdl.handle.net/10603/347746>

- Manuel, J. (2014). *Behavioural Finance and Investors Perception: A Study with Special Reference to Stock Market Investors in Kerala* [Doctoral dissertation, Bangalore University]. <http://hdl.handle.net/10603/350420>
- Nilsson, J. (2008). Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior. *Journal of Business Ethics*, 83(2), 307–325. <https://doi.org/10.1007/s10551-007-9621-z>
- Ninan, A. A. (2019). *Gold as an Investment Avenue: A Study of Government Employees in Kerala* [Doctoral dissertation, Mahatma Gandhi University].
- Nishad, M. (2018). *Share Price Volatility in Indian Stock Market: A Study with Special Reference to Behavioral Aspects of Investors in Kerala* [Doctoral dissertation, University of Calicut].
- Rana, S., & Vibha. (2017). Marital Status and Investment Preferences. *Online International Interdisciplinary Research Journal*, 07, 91-98. ISSN: 2249-9598. <http://www.oijrj.org/issn-2249-9598.html>
- Sajoy, P. B. (2015). *Savings and Investment Pattern of Stock Investors in Kerala State* [Doctoral dissertation, Mahatma Gandhi University].
- The Global Statistics. (2023). *Literacy Rate in India 2023 | Kerala & Bihar Literacy Rate 2023*. <https://www.theglobalstatistics.com/literacy-rate-in-india/>

## Website

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## **CHAPTER 6**

### **FINDINGS, CONCLUSION AND SUGGESTIONS**

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## **FINDINGS, CONCLUSION AND SUGGESTIONS**

### **6.1. Introduction**

Socially responsible investment (SRI) is an opportunity for socially conscious and ordinary investors to incorporate environmental, social and corporate governance factors (ESG factors) into investment decision-making. It is a triple-bottom-line of combining environmental and social factors to financial performance. SRI is one of the exceptionally growing investment sectors in the global arena. India is also following the trend of integrating ESG parameters into investment. SRI is considered a tool for creating corporate social behaviour and thereby helps attain Sustainable Development Goals. SRI aims for long-term competitive returns with some environmental and social well-being. It is not entirely ethical; there is always an aim to make financial gain from investment. Investors are increasingly incorporating environmental and social issues into their investment decisions. Investors, researchers, capital market regulators, financial institutions, financial intermediaries and the business community started to focus on non-financial aspects of investment. Thus, SRI is now one of the most prominent research areas. Investors who give importance to non-financial factors along with financial factors are known as socially responsible or socially conscious investors. The concept of social responsibility is integrated into various asset classes, including stocks, mutual funds, ETFs, bonds, microfinance and community investing. SRI has its roots in CSR (Corporate Social Responsibility). CSR shows the social responsibility of companies, whereas SRI shows the social responsibility of investors. Institutional investors like pension funds, insurance and mutual funds are the major intermediaries in the socially responsible investment market. Retail investors are also showing great interest in SRI.

### **6.2. Statement of the Research Problem**

Socially responsible investment (SRI) is a well-established concept in the global arena, but the concept is still in the process of achieving full-fledged growth in India. The Indian economy faces severe social and environmental issues, such as pollution, overpopulation, unemployment, climate risks, child labour, and natural

calamities. SRI serves as a means to find solutions to these problems and aid in achieving Sustainable Development Goals (SDGs) and, thereby, India's sustainable growth and development. Indian financial market is also trying to create more sustainable financial products. The increased social and environmental issues, corporate scams and the COVID-19 Pandemic fuelled the need for SRI in India. The SEBI is also increasing the number of disclosures on ESG issues of companies and recommendations for ESG reporting. Many ESG-themed mutual and exchange-traded funds have been introduced in India during the last few years, and now SRI is one of India's most prominent research areas. Even in South India, research is being conducted on SRI. However, most SRI studies deal with the comparative performance analysis of SRI with conventional funds. Most of these studies resulted in equal performance of SRI with conventional funds and even outperformance of SRI in some cases.

The number of studies on the perception of Indian investors towards SRI is also limited. The perception and awareness-related studies revealed that investors have positive attitudes and perceptions towards SRI. However, the lack of awareness is the primary reason that prevents investors from engaging in SRI. Even though the state of Kerala is well known for its outstanding standards in literacy, health, employability, transparency and sustainable growth and development, the concept of SRI is not prevalent in Kerala. There is a significant proportion of young people in the state. Suppose these young populations are aware of SRI and its benefit on financial performance, the environment, society and the planet as a whole. In that case, they may invest more in socially responsible companies. These result in more positive corporate social performance. Kerala and India have seen a large number of research on the corporate social responsibility (CSR) policies and programmes of businesses. These studies mainly examine social responsibility from companies' point of view. The social responsibility of investors in Kerala and how these investors perceive the concept of SRI have yet to be addressed. Therefore, this study evaluates investors' awareness towards SRI, the factors that may influence investors' behavioural intention to invest in SRI, and how the stock market investors in Kerala perceive SRI.

### **6.3. Objectives of the study**

The main objectives of the present study are as follows:

1. To estimate the awareness level of Socially Responsible Investment by the stock market investors in Kerala.
2. To measure the perception of stock market investors of Kerala towards the concept of Socially Responsible Investment.
3. To understand the behavioural intention of stock market investors in Kerala towards Socially Responsible Investment.

### **6.4. Research Hypotheses**

#### **6.4.1. General Hypothesis**

H1: There is a significant difference in the influence of motives for investing in the stock market

#### **6.4.2. Objective I Related to awareness on different aspects of socially responsible investment**

H2: There is a significant difference in the awareness on different aspects of socially responsible investment with regard to selected demographic variables and experience of stock market investors.

H3: There is a significant difference in the awareness on sustainability-themed indices with regard to selected demographic variables and experience of stock market investors.

H4: There is a significant difference in the awareness on sustainability-themed funds with regard to selected demographic variables and experience of stock market investors.

H5: There is a significant difference in the general awareness related to sustainability with regard to selected demographic variables and experience of stock market investors.



H6: There is a significant difference in the overall awareness on socially responsible investment with regard to selected demographic variables and experience of stock market investors.

#### **6.4.3. Objective III- Related to factors influencing behavioural intention to invest in SRI**

H7: There is a significant positive influence of attitude towards SRI on behavioural intention to invest in SRI

H8: There is a significant positive influence of subjective norms on behavioural intention to invest in SRI

H9: There is a significant positive influence of perceived behavioural control on behavioural intention to invest in SRI

H10: There is a significant positive influence of social factors on behavioural intention to invest in SRI

H11: There is a significant positive influence of financial performance on behavioural intention to invest in SRI

H12: There is a significant positive influence of corporate governance factors on behavioural intention to invest in SRI

### **6.5. Research Methodology**

The study followed a descriptive research design. Data was collected from both primary and secondary sources. The primary data to analyze investors' awareness and perception towards SRI and behavioural intention to invest in SRI was collected through a sample survey. For this, the non-probability sampling method of purposive sampling was employed. Data was collected by using a structured questionnaire. Behavioural intention is studied by extending the Theory of Planned behaviour introduced by Icek Ajzen (1985, 1991). The primary data was analyzed with the help of various statistical tools like Mean, Standard deviation, Percentages, Fried man test and Kruskal-Wallis H test. The behavioural intention towards socially

responsible investment was studied using Partial Least Square SEM (path model analysis with smartPLS (version 4)).

The study also included a comparative performance analysis of sustainability-themed and market portfolios. Data was collected from the AMFI, NSE, and BSE websites. These data were analyzed with the help of Compounded Annual returns (CAGR), Risk-adjusted return measures such as Sharpe Ratio and Treynor ratio and Jensen's Alpha.

## **6.6. Major Findings of the Study**

The major findings of this study have been divided into six categories, including the demographics of the respondents, their stock market participation, their awareness of and perceptions of socially responsible investing, their socially responsible investment behaviour, and findings based on comparative performance analysis of market portfolios and sustainability portfolios. The major findings are discussed below:

### **6.6.1. Findings based on Demographic profile of the respondents**

The demographic profile of the respondents provides information about the residential location, gender, age, education, occupation, marital status and income of the investors. Based on the analysis of demographic profile, the following findings were drawn:

1. A significant portion of the investors, 77%, were male, which suggests that the majority of stock market investors are males. These indicate the backwardness of females in stock market investment.
2. According to the data, the vast majority of the respondents, 99%, are within the age range of either below 30 years old or between 30 and 60 years old and above the age group of 60 constitute only 1% of the total sample investors.
3. Stock market investment habits are more common among graduates and postgraduates as the majority of the investors are from these two groups (37.9% and 29.4%, respectively), followed by those with Plus Two qualifications (20.2% respondents).

4. Of all the investors surveyed, 37.2% are private sector employees, 22.9% are professionals, and 18.6% are government employees, making these the dominant occupational groups.
5. The largest group among the respondents is those who are married, making up 62.6% of the total, while 34.4% are unmarried.
6. It is also found that 33.3% of the respondents have an annual income of less than 250,000, and 27.5% have an annual income between 250,001 and 500,000.

#### **6.6.2. Findings based on Stock market participation**

1. With 28.2 per cent and 27.5 per cent, respectively, it is discovered that considerable percentages of investors fall into the 1-3 years of experience and 3-5 years of experience categories. Only a small group of investors have more than ten years of experience.
2. The study shows that direct equity is the most popular form of investing for sample investors; 89.2 per cent of investors favour direct equity investments. Furthermore, SIPs are preferred over mutual funds by more than half of the respondents (50.7 per cent). This may be due to the ease of paying a small amount regularly rather than a large lump sum.
3. The majority of the investors (81.7 per cent) preferred only trading as their most preferred mode of trading, and only 15.2 per cent of the sample investors traded through registered brokers. The remaining small portion of investors preferred other modes of trading. The ease and convenience may be the attractive factor towards online trading for the majority.
4. The research found that a sizable portion of respondents (29.1 per cent and 27.3 per cent, respectively) engage in weekly or monthly trading. Additionally, a sizeable percentage of respondents participated in everyday trading activities, with just 19.9 per cent of respondents being occasional traders.
5. It is found that the most influential motive that attracts investors to the stock market is the return from the investment, with a mean rank of 1.1099, and the

second most influential factor is the capital appreciation from the investment. This implies that investors are primarily motivated by improving their wealth through share trading. The variables of tax benefit and participation in corporate social responsibility are found to be the least influential factors.

6. The statistical test results indicate a significant difference in the influence of motives on investing in the stock market and that all the motives have a significantly different influence on trading securities.
7. Most investors preferred investments with normal risk-normal return characteristics, followed by high-risk, high-return characteristics. Only a few investors preferred low-risk, low-return investments.
8. A comparison is made between the kind of investment preferred and the experience of the investors. It is evidenced from the analysis that, regardless of their experience level, investors prefer normal risk-normal return securities, followed by high risk-high return securities. On the other hand, highly experienced investors with more than ten years of experience expressed more preference towards high-risk, high-return securities. Their experience may be the factor that attracts them to investment with high risk-high return characteristics.

### **6.6.3. Findings based on Awareness on Socially Responsible Investment**

The awareness on socially responsible investment is studied under four heads: awareness on different aspects of SRI, awareness on sustainability-themed indices and funds, and general awareness on sustainability. Analysis is also made on the relationship between demographic variables and awareness on SRI. The major findings are listed below:

1. It is clear from the analysis that the sample investors have only a low to moderate understanding of different socially responsible investment-related concepts, with ethical investment being the most well-known, with a mean score of 3.1223, followed by socially responsible investment. Green bonds have the lowest level of awareness among the concepts.

2. The analysis revealed that investors have limited awareness of sustainability-themed indices, with the S&P BSE 100 ESG Index having the highest mean score (2.8191), followed by the NIFTY100 ESG Index. The average level of awareness is low for all indices, with S&P BSE GREENEX being the least known index.
3. The survey results showed that investors have a very low degree of awareness on various sustainability-themed funds. The Avendus India ESG Fund has a slightly highest mean score of 2.6791, followed by the Tata Ethical Fund with a mean score of 2.6773. The Quant ESG Equity Fund has the lowest level of awareness. The average level of awareness for all funds is low, with mean scores ranging from 1.9752 to 2.6791.
4. Regarding general awareness of sustainability, the investors have low awareness of corporate sustainable practices and related variables. A slightly higher mean score is found for awareness of companies' CSR initiatives (2.6525), while the lowest is found for awareness of ESG scores of the companies (2.1986).
5. The awareness on various aspects of SRI, sustainability-themed indices and funds, general awareness on sustainability and overall awareness on SRI are compared across different gender groups. The results indicated that the knowledge of SRI is limited across all gender groups. However, female investors have a slightly higher level of awareness for different aspects of SRI, sustainability-themed indices and funds, and overall awareness on SRI. It is also found that male investors have a slightly higher level of general awareness on sustainability.
6. The statistical test revealed no significant difference in the level of awareness on SRI among investors of different gender groups.
7. The comparison of SRI awareness among investors in different age categories revealed that investors above 60 years of age have the highest awareness of different dimensions of SRI and overall awareness on SRI except for sustainability-themed indices.

8. The statistical tests indicated a significant difference in the level of awareness on different aspects of SRI, sustainability-themed indices and funds, and overall awareness on SRI among investors of different age groups. This implies that the respondents' age significantly influences their awareness of SRI.
9. The study compared the awareness on SRI among different educational groups of investors and found that the level of awareness on SRI is limited across all educational groups. Investors with postgraduate qualifications and investors belonging to other categories, such as PhDs, diplomas or investors with CA and other specialized qualifications, have slightly higher awareness on SRI compared to investors with less qualification.
10. It is inferred from the statistical analysis that educational qualification does not significantly impact investors' awareness of SRI.
11. The occupation-wise analysis on the awareness on of SRI among different occupational groups showed that retired investors have the highest mean score on SRI, and the lowest level of awareness is found for government employees in most cases. It is clear from the mean values that overall awareness on SRI and awareness on different dimensions of SRI is comparatively low across all occupational groups.
12. It is found from the statistical analysis that there is a significant difference in the level of awareness on sustainability-themed funds and overall awareness on SRI among different occupational groups. Across all occupations, retirees had the highest mean awareness on different sustainability-themed funds and overall awareness on SRI.
13. It is evident from the mean values that there is a relatively low awareness rate among all marital status groups of investors. The analysis shows that widowed investors have a somewhat higher level of awareness than other groups.
14. The comparison of awareness on different dimensions of socially responsible investment based on average annual income resulted in limited awareness among all income groups. It is also found that the investors from the below

250000 average annual income group have slightly higher levels of awareness than other groups, and investors from higher income groups have lower levels of awareness in most cases.

15. The comparative analysis of experience in the stock market operation and awareness on SRI shows that the investors with more experience in the stock market tend to have slightly higher awareness of socially responsible investment (SRI) than those with less experience. The results indicated that investors with more than ten years of experience have the highest overall awareness. It is also revealed that awareness is limited among all experience groups.
16. No significant difference was found between the awareness on SRI across investors of different marital status groups, average annual income groups and experience groups.

#### **6.6.4. Findings based on Perception towards Socially Responsible Investment**

Perception towards SRI is evaluated on the grounds of investors' opinions on the integration of social responsibility into investment decisions, reasons for investors' preference and non-preference for socially responsible funds, perception towards sin stocks, perception of risk of SRI compared to conventional funds and preference for different SRI strategies.

1. The study found that a sizeable percentage of investors expressed the opinion that including the idea of social responsibility in stock market investing is very important. The majority of investors believe it is essential to consider social responsibility when making stock market investing decisions.
2. It is revealed that most investors supported the inclusion of social responsibility criteria in their current company's investment decisions. This may be an indication of the growing attraction of investors towards socially responsible investing.
3. It is evident from the study that a large majority of the investors (93.3 per cent) have not invested in any of the socially responsible funds. The

respondents posited that lack of awareness, low returns and profit motivation are the primary reasons for not preferring socially responsible investment. This suggests that the concept of socially responsible investing and its potential benefits may need to be more well-known and understood among the general population.

4. Only 6.7 per cent of respondents have invested in a socially responsible fund, and the security of investing in sustainable products and reasonable returns are the primary motivations behind their investment in socially responsible funds.
5. Half of the investors stated that socially responsible investments have a similar level of risk compared to conventional investments. This implies that investors consider conventional and socially responsible investments equally risky. Additionally, it was shown that a sizable portion of respondents believed that socially responsible investments carry a higher level of risk than traditional investments.
6. When comparing perceptions of the risks of SRI and conventional investments to demographic variables, it is indicated that there is only a small change in the perceived risk across different demographic variables. It is evident from the study that the majority of the investors are not interested in investing in sin companies/industries.
7. The study found that a sizable majority of investors are willing to exercise their shareholder rights to address their company's socially irresponsible activity. They are even ready to withdraw money from their investment on grounds of socially irresponsible behaviour. It was also found that a significant portion of the investors agreed or strongly agreed that they would take legal action against a socially irresponsible company. This could be a sign that investors are becoming increasingly concerned about the social responsibility of the companies they invest in.
8. It is observed that most investors favoured positive screening over all other strategies while engaging in SRI. The second most popular approaches were best-in-class and negative screening. Ethical exclusion and norm-based screening were the least preferred strategies.



### **6.6.5. Findings based on Behaviour intention towards Socially Responsible Investment**

To study the behavioural intention of stock market investors in Kerala towards SRI, partial least squares path model analysis (PLS-SEM) was used. SmartPLS (version 4) software was used for the analysis. Seven hypotheses have been tested based on the structural model developed by employing the Theory of Planned Behaviour.

The results of the hypotheses tested using path modelling are as follows:

- a. There is a significant positive influence of attitude towards SRI on behavioural intention to invest in SRI
- b. There is no significant positive influence of subjective norms on behavioural intention to invest in SRI
- c. There is no significant positive influence of perceived behavioural control on behavioural intention to invest in SRI
- d. There is a significant positive influence of environmental factors on behavioural intention to invest in SRI
- e. There is no significant positive influence of social factors on behavioural intention to invest in SRI
- f. There is a significant positive influence of financial performance on behavioural intention to invest in SRI.
- g. There is no significant positive influence of corporate governance factors on behavioural intention to invest in SRI

Out of the seven hypotheses, three are supported. Attitude, financial performance, and environmental factors positively influence investors' behavioural intention to invest in SRI. The  $R^2$  (coefficient of determination) value of the model is 58.3, which indicates that 58.3% variance in the dependent variable 'behavioural intention' is explained by the independent variables in this study.

#### **6.6.5.a) Attitude -> Behavioural Intention**

There is a significant positive influence of attitude towards SRI on behavioural intention to invest in SRI. The attitude of investors positively influences their intention to invest in SRI. This finding of this study is consistent with the findings of Osman et al. (2019); Khan and Alam (2019); Adam and Shauki (2014); Osman et al. (2020); Raut et al. (2021); Thanki et al. (2022). This empirical evidence suggests a positive influence of attitude towards behavioural intention to invest in SRI. Suppose investors believe that SRI is a good and wise investment decision. In that case, they like the idea of SRI, and having a favourable attitude towards SRI can positively influence their behavioural intention to invest in SRI. The finding of this study is inconsistent with Yew et al. (2019); Jensen et al. (2016). These authors found no significant relationship between attitude and behavioural intention to invest in SRI.

#### **6.6.5.b) Subjective Norms -> Behavioural Intention**

There is no significant positive influence of subjective norms on behavioural intention to invest in SRI. The result is consistent with the results of Osman et al. (2019); Osman et al. (2020). These authors found no significant relationship between subjective norms and behavioural intention to invest in SRI. Social pressure or the perspectives of others may not influence the intention to invest in SRI. The result is inconsistent with the results of Khan and Alam (2019); Adam and Shauki (2014); Raut et al. (2021); Jensen et al. (2016); Thanki et al. (2022). These authors found a positive relationship between subjective norms and behavioural intention to invest in SRI.

#### **6.6.5.c) Perceived Behavioural Control -> Behavioural Intention**

There is no significant positive influence of perceived behavioural control on behavioural intention to invest in SRI. These results align with the findings of Adam and Shauki (2014); Osman et al. (2019). These authors discovered no significant relationship between subjective norms and behavioural intention to invest in SRI. The perceived ease or difficulty of investing in SRI does not influence the behavioural intention to invest in SRI. The finding is inconsistent with the findings of Khan and Alam (2019); Jensen et al. (2016); Osman et al. (2020). These authors identified a

significant relationship between perceived behavioural control and intention to invest in SRI.

#### **6.6.5.d) Environmental factors -> Behavioural Intention**

There is a significant positive influence of environmental factors on behavioural intention to invest in SRI. The finding is confirmed by the previous research of Yew et al. (2019); Mehwish et al. (2022); Sultana et al. (2018). The environmental concern of investors and the positive attitude of investors towards environmental protection positively influence their behavioural intention to invest in SRI. The investors believe that the companies should be responsible towards the environment and it should take necessary steps to protect the environment. The finding is inconsistent with the finding of Raut et al. (2021). This author did not find evidence to support the relationship between environmental factors and intention to invest in SRI.

#### **6.6.5.e) Social factors -> Behavioural Intention**

There is no significant positive influence of social factors on behavioural intention to invest in SRI. This indicated that the result of this study is inconsistent with Mehwish et al. (2022); Sultana et al. (2018). These authors identified a significant relationship between social issues and intention to invest in SRI.

#### **6.6.5.f) Corporate Governance factors -> Behavioural Intention**

There is no significant positive influence of corporate governance factors on behavioural intention to invest in SRI. This is inconsistent with the previous research of Mehwish et al. (2022); Sultana et al. (2018). These authors identified a significant relationship between corporate governance factors and intention to invest in SRI.

#### **6.6.5.g) Financial Performance -> Behavioural Intention**

There is a significant positive influence of financial performance on behavioural intention to invest in SRI. The result is confirmed by the previous research of Raut et al. (2021); Nilsson (2007). The finding suggests a significant influence of financial factors on behavioural intention to invest in SRI. The result is

inconsistent with the result of Yew et al. (2019). The author found no significant relationship between return and intention to invest in SRI.

#### **6.6.6 Findings based on comparative performance analysis**

The first sustainability-themed mutual fund, named SBI Magnum Equity ESG Fund, was introduced by SBI Mutual Fund in 1991. Now, there are several social responsibility-themed indices, mutual funds and ETFs. Most of these funds and ETFs were launched from 2019 onwards. This shows the growing interest in SRI in India. The previous studies revealed that these portfolios yielded similar returns to traditional ones. Certain studies resulted in outperformance, and only a few resulted in the underperformance of sustainability-themed funds. Certain studies also revealed that the social responsibility-themed funds yielded good returns during and after the COVID-19 pandemic.

1. A comparative performance analysis of socially responsible mutual funds and indices is made. The performance is also compared with market portfolios. Compound annual returns and risk-adjusted measures confirmed that social responsibility-themed funds gave investors a reasonable return of more than 12 per cent for the study period of 1st April 2017 to 31st March 2022. It was also found that the risk and volatility of these portfolios are lower with lower beta and standard deviation values.
2. The two-year analysis from 1st April 2020 to 31st March 2022 revealed that the SRI yielded more than 40 per cent compounded annual growth rate except for Axis ESG Equity Fund.

These findings are consistent with Jasuja et al. (2021), Akhileshwari et al. (2021), Jain and Mehrotra (2021); Sood et al. (2022). It suggests that investors can earn a double return while investing in SRI; that is, they can achieve their non-financial objective without sacrificing their financial objective.

## 6.7. Conclusion

Socially responsible investment (SRI) is a prominent global investment segment gaining increasing attention worldwide. In India, SRI has attracted the interest of investors, researchers, companies, regulators, and the government. The quantum of funds managed under SRI has also increased internationally and nationally. Regulators are taking an active interest in promoting SRI. SEBI issued rules and regulations for the ESG reporting and disclosures of Indian companies and is working hard to improve the ESG reporting and disclosures. There has been a significant rise in social responsibility-themed financial products in India, and the number of sustainability rating agencies has also increased. Since 2015, studies focused on SRI, that is, studies regarding its performance, comparative performance analysis, awareness, perception, and behaviour towards SRI have been increased. Financial and educational institutions have also started organizing seminars and workshops on sustainable finance, green finance, environmental accounting, sustainable accounting and SRI. These developments indicate a growing interest in SRI.

This present study aims to shed light on the awareness, perception, and behavioural intention of stock market investors in Kerala regarding SRI. The study revealed that SRI is still in its nascent stage in Kerala, with investors needing more awareness of various aspects of SRI, including sustainability-themed indices, funds, and general sustainability concepts. However, investors in Kerala are familiar with the concept of ethical investing.

The study highlights that the investors in Kerala have a positive perception and attitude towards SRI. They consider integrating social responsibility into stock market investments important and prefer to include social responsibility criteria in their investment decisions. Nevertheless, a lack of awareness is identified as a significant obstacle preventing investors from engaging in SRI. It was also found that most investors were not interested in sin stocks. The study also revealed that the behavioural intention of investors in Kerala towards SRI is significantly influenced by factors such as the financial performance of SRI, investors' attitudes towards SRI and environmental considerations.

Furthermore, the study suggests that socially responsible portfolios exhibit lower volatility and risk than broader market portfolios, achieving similar returns or outperforming market portfolios. This implies that investors can earn satisfactory returns by investing in socially responsible portfolios without compromising social values. However, the lack of awareness and concerns about financial returns pose challenges to investing in SRI.

Given the country's young population, there is immense potential for SRI in India and Kerala. In Kerala specifically, 62% of the population is below 40. Previous studies have indicated that young investors show a greater inclination towards SRI. Therefore, if young individuals become aware of the financial and non-financial benefits of SRI, it can contribute to society, the environment, and the economy as a whole.

To conclude, the impressive growth of the SRI industry nationally and internationally shows the changing attitude of investors, society, regulators and the corporate world towards integrating social responsibility into capital market investment. Now, it is the responsibility of the investors to identify and invest in socially responsible companies. Avoiding such environmentally polluting, socially irresponsible, and other sin stocks from the portfolio can transform the world into a more sustainable planet.

## **6.8. Suggestions**

- Stock market investment habits are low among females and the elderly, as the study revealed that the percentage of female and elderly responses is very few. So, organizing workshops, seminars, and other trading programs to create awareness and education about stock trading for females and older people can encourage them to invest in the stock market. The creation of tailor-made investment options which cater to the needs of women and the elderly can encourage their participation in the share market. Offering user-friendly interfaces, clear instructions, and reachable customer services can encourage the elderly to stock trading.

- The finding shows that a significant proportion of respondents with graduation or above exhibit more inclination towards stock trading than those with lower qualifications. Therefore, raising awareness about stock trading and providing financial education can foster confidence among individuals with lower qualifications, motivating them to engage in investment activities.
- Promote understanding of SRI, create awareness on different aspects of SRI, sustainability-themed indices and funds, and raise awareness on companies' ESG scores, ESG compliance and disclosures, and available investment options to stock market investors in Kerala.
- Conduct workshops and seminars and disseminate information about the positive return of socially responsible funds, the long-term financial return from SRI, the ability of SRI to influence corporate social behaviour, benefits and principles of SRI, the importance of SRI to society, to the shareholders and other stakeholders, to the environment and the planet as whole and thereby encourage them to invest in SRI.
- Raise investor awareness about the potential benefit of aligning social values with investment through SRI without sacrificing their financial goals.
- Encourage investors to give more attention to their companies' CSR initiatives.
- Educate investors about the negative aspects of investing in sin companies and industries.
- Inform and educate investors about actions that can be taken against socially irresponsible companies. Raise investor awareness on shareholder activism, use their right as shareholders, seek legal remedies and divest or sell shares after considering the financial impact.
- Educate investors about various methods to select SRI portfolios and various SRI screening strategies and help them integrate ESG factors in investment decision-making.

- Make it easier for investors to access the ESG scores of the companies, ESG ratings, ESG disclosures, and ESG performance of companies.

## **6.9. Implications of the study**

The present study has both theoretical and practical implications.

- This study contributes to the literature on creating a model explaining behavioural intention towards socially responsible investment. The model was empirically tested and found that it has predictive relevance.
- The study may help investors in Kerala become more educated and aware of socially responsible investment (SRI), principles of SRI, benefits of SRI, the various investment options available on SRI, the performance of SRI-themed funds and indices, SRI screening strategies, various aspects and terminologies related to SRI.
- The study would also be helpful for investors to identify and invest in socially responsible companies.
- The study will give investors insight into the non-financial aspects of share market investment and the importance of their investment to society and the environment.
- By understanding the factors influencing the behavioural intention to invest in SRI, stock brokers, asset managers, investment advisors, and financial institutions can offer investors tailor-made socially responsible financial products.
- The study's findings and recommendations may aid in formulating appropriate rules and regulations by the authorities and regulators to promote sustainable investment practices.
- The corporate sector recognizes the need for socially responsible investment, encourages corporate social behaviour and thereby contributes towards society's development, reduces carbon emission and emission of GHGs, uses



renewable sources of energy, promotes sustainable business practices and contributes towards sustainable development.

- Although the state has a high banking penetration and literacy rate, it lags behind other states regarding share market investment. If people in Kerala are aware of the potential of SRI, more individuals may be drawn to the market.

## References

- Adam, A. A., & Shauki, E. R. (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production*, 80, 224–240. <https://doi.org/10.1016/j.jclepro.2014.05.075>
- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2021). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemae Meridionalis*, 24(3), 95–106. <https://doi.org/10.32725/acta.2021.014>
- Jain, N., & Mehrotra, V. (2021). A Comparative Study of Performance of ESG Indices with Parent Index in Indian Stock Market. *Pacific Business Review (International)*, 14(2), 101-109. <https://www.researchgate.net/publication/357127666>
- Jasuja, D., Prosad, J. M., & Nautiyal, N. (2021). A Comparative Performance Analysis of Sustainability Themed Indices in India: Markov Regime Switching Approach. *Sage Journals*. <https://doi.org/10.1177/23197145211052805>
- Jensen, C., Sandberg, P., & Huynh, R. (2016). "Doing good while doing well": An investigation of Generation Y's intention to invest socially responsibly.
- Khan, A., & Alam, A. S. (2019). Retail Investors' Attitude towards Socially Responsible Investment (SRI) in India: Examining the Role of Religiosity and Moral Norms within TPB Framework. *International Journal of Advanced Science and Technology*, 28(7), 224-238. ISSN: 2005-4238.
- Mehwish., Afeef, M., & Kakakhel, S. J. (2022). ESG Factors and their Influence on the Investment Behavior of Individual Investors: A Case from Pakistan. *International Journal of Business and Management Sciences*, 3(3), 21-45. <https://www.ijbms.org>. E-ISSN 2708-4337.
- Osman, I., Ma'in, M., Muda, R., Husni, N. S. A., Alwi, S. F. S., & Hassan, F. (2019). Determinants of behavioural intention towards green investments: The perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16-38.
- Osman, I., Subramaniam, G., Mohamad, S., Hanif, A., Hassan, F., & Yaakob, S. (2020). The Adoption of Socially Responsible Investments: Gen-Y Perspectives. *Malaysian Journal of Consumer and Family Economics*.
- Raut, R. K., Kumar, R., & Das, N. (2021). Individual investors' intention towards SRI in India: An implementation of the theory of reasoned action. *Social Responsibility Journal*, 17(7), 877–896. <https://doi.org/10.1108/SRJ-02-2018-0052>
- Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2022). Did ESG portfolio augment investors' wealth during Covid-19? Evidence from Indian stock market. *Sustainability Accounting Management and Policy Journal*, 14(2). <https://doi.org/10.1108/SAMPJ-02-2022-0087>
- Sultana, S., Zulkifli, N., & Zainal, D. (2018). Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. *Sustainability*, 10(6), 1831. <https://doi.org/10.3390/su10061831>

- Thanki, H., Shah, S., Rathod, H. S., Oza, A. D., & Burduhos-Nergis, D. D. (2022). I Am Ready to Invest in Socially Responsible Investments (SRI) Options Only If the Returns Are Not Compromised: Individual Investors' Intentions toward SRI. *Sustainability*, *14*(18), 11377. <https://doi.org/10.3390/su141811377>
- Yew, C. M., Ni, L. K., Sin, L. P., & Chen, Y. P. (2019). *Factors that Affect Investor's Intention to Invest in Social Responsibility Investment (SRI)* [Bachelor of Finance (HONS) Project, Universiti Tunku Abdul Rahman].

**CHAPTER 7**  
**RECOMMENDATIONS AND SCOPE FOR FURTHER**  
**RESEARCH**

# **CHAPTER 7**

## **RECOMMENDATIONS AND SCOPE FOR FURTHER RESEARCH**

### **7.1. Introduction**

This chapter presents important recommendations for creating awareness for promoting socially responsible investment and other recommendations for advancing socially responsible investment. This chapter also discusses the scope for further research.

### **7.2. Recommendations of the study**

- Create educational materials focused explicitly on socially responsible investment (SRI) and integrate them into the free classes on share trading conducted by the SEBI Investor Awareness Division.
- Incorporate SRI-related topics into the educational curriculum to ensure that young investors are well-informed about the importance of SRI and SRI practices.
- Promote awareness on SRI among stock brokers, financial institutions, fund managers and investment advisors, and encourage the development of SRI-related products, services and portfolios.
- Advocate for regulatory measures that make ESG reporting mandatory to all companies.
- Encourage Indian companies to adopt global best practices on ESG and attain long-term growth, reputation and viability to attract foreign capital and potentially reduce legal requirements and political burdens. The companies should focus on ESG initiatives and publish the same.
- Reward and recognize companies with good corporate social behaviour and ESG performance and publicly disclose the names of companies that fail to meet ESG reporting and disclosure requirements.

- Ensure uniformity in ESG rating criteria used by sustainability rating agencies and also regulate these sustainability rating agencies.

### **7.3. Scope for further research**

- In this study, the behavioural intention towards SRI was studied; the socially responsible investment behaviour can be studied by employing the Theory of Planned Behaviour.
- The Theory of Planned Behaviour can be extended by adding other variables such as religiosity, moral norms, moral intensity, financial literacy, perceived consumer effectiveness, purpose of investment, perception of risk, knowledge, reputation, situational factors and demographic variables. The mediation and moderation effects of different variables can also be studied.
- The behaviour of investors already invested in socially responsible funds can be studied to evaluate the factors influencing their actual behaviour towards SRI.
- Similar studies can be conducted in other parts of India.

## **BIBLIOGRAPHY**

## Bibliography

- Adam, A. A., & Shauki, E. R. (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production*, 80, 224–240. <https://doi.org/10.1016/j.jclepro.2014.05.075>
- Aditya Birla Capital Mutual Fund. (2021, October 29). *Aditya Birla Sun Life ESG Fund: Key Information Memorandum*. <https://mutualfund.adityabirlacapital.com/-/media/bsl/files/resources/forms/applicationforms/kim-absl-esg-fund-291021.pdf>
- Agyapong, D., & Ewusi, M. (2017). Perceptions about Social Responsible Investing among Academic Staff: Evidence from the University of Cape Coast, Ghana. *Advances in Research*, 10(2), 1–17. <https://doi.org/10.9734/AIR/2017/33420>
- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control* (pp. 11–39). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2005). *Attitudes, Personality, and Behavior* (2nd ed.). Open University Press.
- Ajzen, I. (2006). *Constructing a Theory of Planned Behavior Questionnaire*. Technical Report. <https://www.researchgate.net/publication/235913732>
- Akhileshwari, A., Kishore Babu, B., & Saxena, R. (2021). Forecasting of Net Asset Value of selected Environmental, Social and Governance (ESG) Mutual Funds in India using ARIMA Model. *Acta Universitatis Bohemae Meridionalis*, 24(3), 95–106. <https://doi.org/10.32725/acta.2021.014>
- Ang, W. R., & Weber, O. (2018). The market efficiency of socially responsible investment in Korea. *Journal of Global Responsibility*, 9(1), 96–110. <https://doi.org/10.1108/JGR-11-2016-0030>
- Apostolakis, G., Kraanen, F., & Van Dijk, G. (2016). Pension beneficiaries' and fund managers' perceptions of responsible investment: A focus group study. *Corporate Governance: The International Journal of Business in Society*, 16(1), 1–20. <https://doi.org/10.1108/CG-05-2015-0070>
- Arjalie's, D.-L. (2010). A Social Movement Perspective on Finance: How Socially Responsible Investment Mattered. *Journal of Business Ethics*, 92, 57–78. <https://doi.org/10.1007/s10551-010-0634-7>
- Asia Index Private Limited. (2014). *S&P Dow Jones Indices: S&P BSE CARBONEX Methodology*.
- Asia Index Private Limited. (2022) *S&P BSE Sustainability Indices Methodology*.
- Asia Index Private Limited. (2022). *S&P BSE 100 ESG Index Methodology*.
- Asvathitanont, C., & Tangjitprom, N. (2020). The Performance of Environmental, Social, and Governance Investment in Thailand. *International Journal of Financial Research*, 11(6), 253–261. <https://doi.org/10.5430/ijfr.v11n6p253>



- Atan, R., Alam, Md. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182–194. <https://doi.org/10.1108/MEQ-03-2017-0033>
- Avendus. (2019, February 7). *Avendus India ESG Fund*. <https://www.avendus.com/india/newsroom/avendus-has-successfully-launched-india-s-first-esg-fund>
- Axis Mutual Fund. (2023, October 31). *Scheme Information Document: Axis ESG Equity Fund*. <https://www.axismf.com/cms/sites/default/files/Statutory/Axis%20ESG%20Equity%20Fund%20-%20SID.pdf>
- Babu, K. A., & Giridhar, K. V. (March 2021). Socially Responsible Investment (SRI) Attitude of Mutual Fund Investors in Karnataka. *Towards Excellence: An Indexed, Refereed & Peer-Reviewed Journal of Higher Education*, 13(1), 131-147. <https://hrdc.gujaratuniversity.ac.in/>
- Badía, G., Cortez, M. C., & Ferruz, L. (2020). Socially responsible investing worldwide: Do markets value corporate social responsibility?. *Corporate Social Responsibility and Environmental Management*, 27(6), 2751-2764.
- Badía, G., Ferruz, L., & Cortez, M. C. (2021). The performance of social responsible investing from retail investors' perspective: international evidence. *International Journal of Finance & Economics*, 26(4), 6074-6088. <https://doi.org/10.1002/ijfe.2109>
- Bajrachrya, R. B., & Samdani, G. L. (2021). Socially Responsible Investment (SRI) Attitude of Mutual Fund Investors in Nepal. *Nepal Journal of Multidisciplinary Research*, 4(4), 23–32. <https://doi.org/10.3126/njmr.v4i4.43092>
- Banu, A. A. A. S., Bhuvanewari, T. S., & Begum, S. (2021). A Study on the Sustainable Investment Funds with Special Reference to State Bank of India ESG Mutual Fund Schemes. *Turkish Journal of Computer and Mathematics Education*, 12(6), 261-266.
- Barnett, M. L., & Salomon, R. M. (2006). Beyond Dichotomy: The Curvilinear Relationship Between Social Responsibility and Financial Performance. *Strategic Management Journal*, 27, 1101–1122. <https://doi.org/10.1002/smj.557>
- Barom, M. N. (2013). *An Analysis of Social Responsibility Dimension in Islamic Investment Funds: Evidence from Malaysian Investors* [Doctoral Thesis, Durham University]. Durham E-Theses Online: <http://etheses.dur.ac.uk/7001/>
- Barom, M. N. (2015). Social responsibility dimension in Islamic investment: A survey of investors' perspective in Malaysia. *Ethics, Governance and Regulation in Islamic Finance*, 5, 91-103.
- Barreda-Tarrazona, I., Matallín-Sáez, J. C., & Balaguer-Franch, M. R. (2011). Measuring Investors' Socially Responsible Preferences in Mutual Funds. *Journal of Business Ethics*, 103(2), 305–330. <https://doi.org/10.1007/s10551-011-0868-z>
- Bauer, R., Otten, R., & Tourani Rad, A. (2006). Ethical investing in Australia: Is there a financial penalty? *Pacific-Basin Finance Journal*, 14, 33–48. <https://doi.org/10.1016/j.pacfin.2004.12.004>
- Ben Ameer, H., & Senanedsch, J. W. (2014). Socially Responsible Investments: An International Empirical Study of Time-Varying Risk Premiums. *Journal of Applied Business Research (JABR)*, 30(5), 1513-1524. <https://doi.org/10.19030/jabr.v30i5.8804>

- Bennett, M. S., & Iqbal, Z. (2013). How socially responsible investing can help bridge the gap between Islamic and conventional financial markets. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(3), 211–225. <https://doi.org/10.1108/IMEFM-Aug-2012-0078>
- Benny, V. (2021). A Study on Attitude of Women Investors towards Stock Market Investment in Kerala. *Anvesak*, 51(1), 114-121. <https://www.researchgate.net/publication/351547821>
- Berelson, B. (1952). *Content analysis in communication research*.
- Berry, T. C., & Junkus, J. C. (2013). Socially Responsible Investing: An Investor Perspective. *Journal of Business Ethics*, 112(4), 707–720. <https://doi.org/10.1007/s10551-012-1567-0>
- Biermans, M., Kemeling, E., van Lanschot, W., Chan, F. Y., & Buckley, N. (2014). *Integrating ESG in Private Equity. Principles for Responsible Investment*. <https://www.unpri.org/download?ac=252>
- Bollen, N. P. B. (2007). Mutual Fund Attributes and Investor Behavior. *The Journal of Financial and Quantitative Analysis*, 42(3), 683-708. <https://www.jstor.org/stable/27647316>
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York, NY: Harper
- Bruin, B. de. (2013). Socially Responsible Investment in the alcohol industry: an assessment of investor attitudes and ethical arguments. *Contemporary Social Science*, 8(1), 58-70. <https://doi.org/10.1080/21582041.2012.751494>
- BSE. (n.d.). *Guidance Document on ESG Disclosures*.
- Camilleri, M. A. (2017). Socially Responsible and Sustainable Investing. *Corporate Sustainability, Social Responsibility and Environmental Management*, (61- 77). <https://www.researchgate.net/publication/329059833>
- Campagna, J. (2004). United Nations Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights: The International Community Asserts Binding Law on the Global Rule Makers. *UIC Law Review*, 37(4), 1205-1252.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Capital Group. (2022). *ESG Global Study*.
- Caplan, L. (2013). *From SRI to ESG: The Changing World of Responsible Investing*. Commonfund Institute.
- Chakrabarty, B., Lee, S. B., & Singh, N. (2017). Doing good while making money: Individual investor participation in socially responsible corporations. *Management Decision*, 55(8), 1645–1659. <https://doi.org/10.1108/MD-01-2017-0005>
- Chalissery, N., Tabash, M. I., Nishad T, M., & Saleh Al-Faryan, M. A. (2023). A bibliometric analysis of socially responsible investment based on thematic clustering. *Cogent Business & Management*, 10(1), 2154057. <https://doi.org/10.1080/23311975.2022.2154057>
- Chamorro-Mera, A., & Palacios-González, M. M. (2019). Socially responsible investment: An analysis of the structure of preferences of savers. *Corporate Social Responsibility and Environmental Management*, 26(6), 1423–1434. <https://doi.org/10.1002/csr.1757>

- Chang, C. E., & Doug Witte, H. (2010). Performance Evaluation of U.S. Socially Responsible Mutual Funds: Revisiting Doing Good and Doing Well. *American Journal of Business*, 25(1), 9–24. <https://doi.org/10.1108/19355181201000001>
- Chang, C. E., Nelson, W. A., & Doug Witte, H. (2012). Do green mutual funds perform well? *Management Research Review*, 35(8), 693–708. <https://doi.org/10.1108/01409171211247695>
- Chaubey, D. S., Dev, R., & Patra, S. (2016). A study on the ethical considerations in investors' investment decisions. *Splint International Journal of Professionals*, 3(5), 7-16.
- Chelawat, H., & Trivedi, I. V. (2016). The business value of ESG performance: The Indian context. *Asian Journal of Business Ethics*, 5(1–2), 195–210. <https://doi.org/10.1007/s13520-016-0064-4>
- Chhetri, R., & Sharma, D. (2022). A Study on the Level of Awareness and Perception of Investors Regarding Socially Responsible Investing in Sikkim. *East Asian Journal of Multidisciplinary Research (EAJMR)*, 1(10), 2041-2052. <https://doi.org/10.55927/eajmr.v1i10.1381>
- Chin, W. W. (2009). How to write up and report PLS analyses. In *Handbook of partial least squares: Concepts, methods and applications* (pp. 655-690). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Chin, W. W. (2010). How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. W.
- Chowdhury, M. A. F., & Masih, M. (2015). *Socially responsible investment and Shariah-compliant investment compared: Can investors benefit from diversification? An ARDL approach*. <https://mpira.ub.uni-muenchen.de/65828/>
- Chufama, M., Sithole, F., & Utaumire, Y. (2021). A Review of Corporate Social Responsibility Theories and Models. *International Journal of Economics, Commerce and Management*, IX (3), 104-119. <https://www.researchgate.net/publication/350090115>
- cKinetics. (2018). *Cracking the Conundrum*.
- Confederation of Indian Industry. (2013). *PwC Handbook on Corporate Social Responsibility in India 2013*.
- Copp, R., Kremmer, M. L., & Roca, E. (2010). Should funds invest in socially responsible investments during downturns?: Financial and legal implications of the fund manager's dilemma. *Accounting Research Journal*, 23(3), 254-266. <https://doi.org/10.1108/10309611011092583>
- Cortez, M. C., Silva, F., & Areal, N. (2009). *Socially responsible investing in the global market: The performance of US and European funds*.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-302.
- Daga, A., Natrajan, A., Miglani, D., Bhatti, I., Laddha, R., & Suresh, S. L. (n.d.). *Finance and Investment Cell Shri Ram College of Commerce*.
- Dalal, K. K., & Thaker, N. (2019). *ESG and Corporate Financial Performance: A Panel Study of Indian Companies*.
- Daugaard, D. (2020). Emerging new themes in environmental, social and governance investing: A systematic literature review. *Accounting & Finance*, 60(2), 1501–1530. <https://doi.org/10.1111/acfi.12479>

- De Zwaan, L., Brimble, M., & Stewart, J. (2015). Member perceptions of ESG investing through superannuation. *Sustainability Accounting, Management and Policy Journal*, 6(1), 79–102. <https://doi.org/10.1108/SAMPJ-03-2014-0017>
- De, I., & Clayman, M. R. (2014). *The Benefits of Socially Responsible Investing: An Active Manager's Perspective*. <http://ssrn.com/abstract=2464204>.
- Deloitte Poland. (2011). *Investment Decisions and Corporate Social Responsibility Survey Report*.
- Derwall, J., Koedijk, K., & Ter Horst, J. (2010). *A tale of values-driven and profit-seeking social investors*.
- Dhasmana, S., Ghosh, S., & Kanjilal, K. (2023). Does investor sentiment influence ESG stock performance? Evidence from India. *Journal of Behavioral and Experimental Finance*, 37, 100789. <https://doi.org/10.1016/j.jbef.2023.100789>
- Dilla, W., Janvrin, D., Perkins, J., & Raschke, R. (2016). Investor views, investment screen use, and socially responsible investment behavior. *Sustainability Accounting, Management and Policy Journal*, 7(2), 246–267. <https://doi.org/10.1108/SAMPJ-07-2015-0066>
- Dorfleitner, G., & Nguyen, M. (2016). Which proportion of SR investments is enough? A survey-based approach. *Business Research*, 9(1), 1–25. <https://doi.org/10.1007/s40685-016-0030-y>
- Dorfleitner, G., & Sebastian, Utz. (2014). Profiling German-speaking socially responsible investors. *Qualitative Research in Financial Markets*, 6(2), 118–156. <https://doi.org/10.1108/QRFM-07-2012-0024>
- Douma, K., Scott, L., & Bulzomi, A. (2017). *The SDG Investment Case*. Principles for Responsible Investment. <https://www.unpri.org/download?ac=5909>
- Easton, S., & Pinder, S. (2018). *Theory and empirical evidence on socially responsible investing and investment performance: Implications for fund trustees and their members*. Australian Centre for Financial Studies.
- Edelweiss, Bank of America, Morgan Stanley. (2020). *ICICI Prudential ESG Fund*. [https://www.icicipruamc.com/docs/default-source/default-document-library/icici-prudential-esg-fund-\\_investor-version-\(2\).pdf](https://www.icicipruamc.com/docs/default-source/default-document-library/icici-prudential-esg-fund-_investor-version-(2).pdf)
- Egurla, K., & Kiran, V. U. (2018). A Study on Sustainable Stock Exchanges in India and the World. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3992144>
- Escrig-Olmedo, E., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2010). Socially responsible investing: sustainability indices, ESG rating, and information provider agencies. *International Journal of Sustainable Economy*, 2(4), 442–461.
- Escrig-Olmedo, E., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2013). Sustainable Development and the Financial System: Society's Perceptions About Socially Responsible Investing. *Business Strategy and the Environment*, 22(6), 410–428. <https://doi.org/10.1002/bse.1755>
- Eurosif. (2018). *European SRI Study 2018*.
- Ferraro, F. (n.d.). *Why Do People Invest in ESG Funds?*
- Field, A. (2012). *Discovering statistics using SPSS: And sex and drugs and rock'n'roll* (3. ed., repr). Sage.

- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Fritz, K. J. M. (2020). *Socially Responsible Investments: A Performance Analysis* [Master thesis]. Copenhagen Business School.
- Fritz, T. M., & von Schnurbein, G. (2015). *Mission Investing in Europe – A Meta-analysis*. (CEPS Working Paper Series 5).
- Gandhi, A., & Rao, M. (2023). A Study on Impact of Socially Responsible Investment and Shareholders Personal Values on Investment Decisions. *South India Journal of Social Sciences*, XXI(22), 91-99. ISSN: 0972 – 8945. <https://www.researchgate.net/publication/371349022>
- Garg, A., Goel, P., Goel, P., Sharma, A., & Rana, N. P. (2022). As you sow, so shall you reap: Assessing drivers of socially responsible investment attitude and intention. *Technological Forecasting and Social Change*, 184, 122030. <https://doi.org/10.1016/j.techfore.2022.122030>
- Garzón Castrillón, M. A. (2021). The concept of corporate governance. *Visión de Futuro*, 25, No 2 (Julio-Dic), 178–194. <https://doi.org/10.36995/j.visiondefuturo.2021.25.02R.005.en>
- Geczy, C. C., Stambaugh, R. F., & Levin, D. (2005). Investing in Socially Responsible Mutual Funds. University of Pennsylvania. *SSRN's eLibrary*. <http://dx.doi.org/10.2139/ssrn.416380>
- George, S. (2017). *Study on the Perception and Behaviour of Retail Investors towards Mutual Fund Investment: A Study among Mutual Fund Investors in Cochin* [Doctoral dissertation, Cochin University of Science and Technology].
- Gil-Bazo, J., Ruiz-Verdú, P., & Santos, A. A. P. (2008). *The Performance of Socially Responsible Mutual Funds: The Role of Fees and Management Companies*.
- Gill, A., & Mathur, N. (2018). Religious beliefs and the promotion of socially responsible entrepreneurship in the Indian agribusiness industry. *Journal of Agribusiness in Developing and Emerging Economies*, 8(1), 201–218. <https://doi.org/10.1108/JADEE-09-2015-0045>
- Global Sustainable Investment Alliance. (2018). *Global Sustainable Investment Review*.
- Global Sustainable Investment Alliance. (2020). *Global Sustainable Investment Review*.
- Global Sustainable Investment Alliance. (2022). *Global Sustainable Investment Review*.
- Gössling, T., & Buitter, B. (2017). Socially Responsible Investment Engagement. In R.E. Freeman et al. (Eds.), *Stakeholder Engagement: Clinical Research Cases (Issues in Business Ethics)*, 46, 113-135. Springer International Publishing AG. [https://doi.org/10.1007/978-3-319-62785-4\\_6](https://doi.org/10.1007/978-3-319-62785-4_6)
- GRI. (2016). *Global Initiative for Sustainability Ratings*.
- Gupta, S. (2011). Consumer stakeholder view of corporate social responsibility: A comparative analysis from USA and India. *Social Responsibility Journal*, 7(3), 363–380. <https://doi.org/10.1108/17471111111154518>
- Guyatt, D. (2005). Meeting objectives and resisting conventions: A focus on institutional investors and long-term responsible investing. *Corporate Governance: The International Journal of Business in Society*, 5(3), 139–150. <https://doi.org/10.1108/14720700510604779>

- Haigh, M. (2008). What Counts in Social Managed Investments: Evidence from an International Survey. In *Advances in Public Interest Accounting*, 13, 35–62. Emerald (MCB UP). [https://doi.org/10.1016/S1041-7060\(07\)13003-0](https://doi.org/10.1016/S1041-7060(07)13003-0)
- Hair Jr., J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-80519-7>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced issues in partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.)*. Thousand Oaks, CA: Sage.
- Ham, M. (2018). *Applying the Theory of Planned Behaviour in Predicting the Intention to Implement Corporate Social Responsibility*.
- Hanifa, K. U., & Atmini, S. (2023). The role of social investing efficacy in mediating the effect of individual values on ethical investment decisions. *Jurnal Akuntansi dan Keuangan Indonesia*, 20(1), 1-24.
- Hartz Pinto, D., Funcia Lemme, C., & Pereira Câmara Leal, R. (2014). Socially responsible stock funds in Brazil. *International Journal of Managerial Finance*, 10(4), 432–441. <https://doi.org/10.1108/IJMF-10-2013-0107>
- Hassan, A. (2009). After the credit crunch: The future of Shari’ah compliant sustainable investing. *Humanomics*, 25(4), 285–296. <https://doi.org/10.1108/08288660910997656>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hirschberger, M., Steuer, R. E., Utz, S., & Wimmer, M. (2012). *Is socially responsible investing just screening? Evidence from mutual funds* (SFB 649 Discussion Paper No. 2012-025). Humboldt-Universität zu Berlin, SFB 649. Retrieved from <http://sfb649.wiwi.hu-berlin.de>
- Hofmann, E., Hoelzl, E., & Kirchler, E. (2005). *Ethical investment: How do moral considerations influence investment behaviour?*
- Hornuf, L., & Yüksel, G. (2023). The performance of socially responsible investments: A meta-analysis. *European Financial Management*, eufm.12439. <https://doi.org/10.1111/eufm.12439>
- HSBC Mutual Fund. (2023, April 28). *Scheme Information Document: HSBC Global Equity Climate Change Fund of Fund*. [hsbc-global-equity-climate-change-fund-of-fund-nfo-sid.pdf](https://www.hsbc-global-equity-climate-change-fund-of-fund-nfo-sid.pdf)
- Humphrey, J. E., & Lee, D. D. (2011). Australian Socially Responsible Funds: Performance, Risk and Screening Intensity. *Journal of Business Ethics*, 102(4), 519–535. <https://doi.org/10.1007/s10551-011-0836-7>

- India Index Services & Products Limited. (2018, March). *NIFTY 100 Enhanced ESG Index*.  
[https://www.niftyindices.com/docs/default-source/indices/nifty100-enhanced-esg/nifty\\_esg\\_indices\\_whitepaper.pdf?sfvrsn=eba79834\\_4](https://www.niftyindices.com/docs/default-source/indices/nifty100-enhanced-esg/nifty_esg_indices_whitepaper.pdf?sfvrsn=eba79834_4)
- Invesco Mutual Fund. (2021). *Invesco ESG Equity Fund*.  
<https://www.invescomutualfund.com/docs/default-source/default-document-library/esg-equity-fund>
- Ioannou, I., & Serafeim, G. (2015). The impact of corporate social responsibility on investment recommendations: Analysts' perceptions and shifting institutional logics: CSR and Investment Recommendations. *Strategic Management Journal*, 36(7), 1053–1081.  
<https://doi.org/10.1002/smj.2268>
- Iyer, E. S., & Kashyap, R. K. (2009). Noneconomic goals of investors. *Journal of Consumer Behaviour*, 8(5), 225–237. <https://doi.org/10.1002/cb.281>
- Jain, D., & Singh, D. A. (n.d.). *Modelling on Behaviour of Indian Investor Towards Responsible Investing Using ISM*.
- Jain, N., & Mehrotra, V. (2021). A Comparative Study of Performance of ESG Indices with Parent Index in Indian Stock Market. *Pacific Business Review (International)*, 14(2), 101-109.  
<https://www.researchgate.net/publication/357127666>
- Jansson, M., & Biel, A. (2014). Investment Institutions' Beliefs About and Attitudes Toward Socially Responsible Investment (SRI): A Comparison Between SRI and Non-SRI Management. *Sustainable Development*, 22(1), 33–41. <https://doi.org/10.1002/sd.523>
- Jasuja, D., Prosad, J. M., & Nautiyal, N. (2021). A Comparative Performance Analysis of Sustainability Themed Indices in India: Markov Regime Switching Approach. *Sage Journals*.  
<https://doi.org/10.1177/23197145211052805>
- Jayasekera, M. A. K. De. S., & Pushpakumari, M. D. (2020). Ethical Banking as an Alternative to Conventional Banking? A Literature Review. *Sri Lankan Journal of Business Economics*, 9(II), 61-79.
- Jensen, C., Sandberg, P., & Huynh, R. (2016). *"Doing good while doing well": An investigation of Generation Y's intention to invest socially responsibly*.
- Jha, B., & Bakhshi, P. (2019). Green Finance: Fostering Sustainable Development in India. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 3798–3801.  
<https://doi.org/10.35940/ijrte.D8172.118419>
- Jo, H., & Harjoto, M. A. (2012). The Causal Effect of Corporate Governance on Corporate Social Responsibility. *Journal of Business Ethics*, 106(1), 53–72. <https://doi.org/10.1007/s10551-011-1052-1>
- Johansson, C., & Brandt, M. (2015). *Are ethical mutual funds safer than conventional mutual funds in the European market? A matched pair analysis of the risk in ethical mutual funds based on three GARCH models' estimates from a five-factor model* [Master Thesis, Jönköping University].
- Jonwall, R., Gupta, S., & Pahuja, S. (2022). Socially responsible investment behavior: a study of individual investors from India. *Review of Behavioral Finance*, 15 (6), 865-888.  
<https://doi.org/10.1108/RBF-05-2021-0099>
- Juetten, S. (2011). *Investors Guide to Socially Responsible and Sustainable Investing*.
- Jun, H. (2013). Investing Well by Investing for Good?: Exploring the Motivations of Socially Responsible Investors. *International Studies Review*, 14(1), 29-56.

- Junkus, J., & Berry, T. D. (2015). Socially responsible investing: A review of the critical issues. *Managerial Finance*, 41(11), 1176–1201. <https://doi.org/10.1108/MF-12-2014-0307>
- Jyothi, P.T. (2020). *Investor behaviour towards Capital Market in Kerala* [Doctoral dissertation, Madurai Kamaraj University]. <http://hdl.handle.net/10603/347746>
- Kempf, A., & Osthoff, P. (2006). *The Effect of Socially Responsible Investing on Financial Performance*.
- Khan, A., & Alam, A. S. (2019). Retail Investors' Attitude towards Socially Responsible Investment (SRI) in India: Examining the Role of Religiosity and Moral Norms within TPB Framework. *International Journal of Advanced Science and Technology*, 28(7), 224-238. ISSN: 2005-4238.
- Khan, F. I. (2022). Exploring socially responsible investment in Pakistan. *Perspectives*, 30, 1-6. Centre for Strategic and Contemporary Research.
- Kinder, P. D. (2007). *"Socially Responsible Investing": An Evolving Concept in a Changing World*.
- Kiran, V. U., & Tadoori, G. (2018). Integration of ESG Investment with the Traditional Portfolio- a Study of TATA Mutual Funds. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3704684>
- Knoll, M. S. (2002). Ethical Screening in Modern Financial Markets: The Conflicting Claims Underlying Socially Responsible Investment. *The Business Lawyer*, 57(2), 681-726.
- Ko, W. S., & Kim, S. S. (2015). Capital Market Performance of Social Responsibility Investing (SRI) Firms. *International Journal of Managerial Studies and Research (IJMSR)*, 3(2), 91-102.
- Kotak Mutual Fund. (2020). *Kotak ESG Opportunities Fund*. [https://dms.kotakmf.com/DMS/public/upload/1605764333967\\_Kotak\\_ESG\\_Opportunities\\_Fund-18-11-2020.pdf](https://dms.kotakmf.com/DMS/public/upload/1605764333967_Kotak_ESG_Opportunities_Fund-18-11-2020.pdf)
- KSIDC. (2022). Kerala to be the hub of responsible investment. *On Industry and Investment Promotion*, 1(1).
- Latinovic, M., & Obradovic, T. (2013). The Performance of Socially Responsible Investments. *Entrepreneurial Business and Economics Review*, 1(2), 29–39. <https://doi.org/10.15678/EBER.2013.010203>
- Leys, J., Vandekerckhove, W., & Van Liedekerke, L. (2009). A Puzzle in SRI: The Investor and the Judge. *Journal of Business Ethics*, 84(2), 221–235. <https://doi.org/10.1007/s10551-008-9705-4>
- Li, W., Xu, J., & Zheng, M. (2018). Green Governance: New Perspective from Open Innovation. *Sustainability*, 10(11), 2-19. <https://doi.org/10.3390/su10113845>
- Louche, C. (2009). Corporate Social Responsibility: The Investor's Perspective. In S. O. Idowu & W. Leal Filho (Eds.), *Professionals' Perspectives of Corporate Social Responsibility* (pp. 211–231). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-02630-0\\_12](https://doi.org/10.1007/978-3-642-02630-0_12)
- Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review*, 32(3), 817–835. <https://doi.org/10.5465/amr.2007.25275676>
- Malla, V. (2017). *The S&P BSE 100 ESG Index: A Strategy for the Socially Responsible Market Participant*. Asia Index Pvt. Ltd.



- Manuel, J. (2014). *Behavioural Finance and Investors Perception: A Study with Special Reference to Stock Market Investors in Kerala* [Doctoral dissertation, Bangalore University]. <http://hdl.handle.net/10603/350420>
- Martí-Ballester, C. P. (2015). Investor reactions to socially responsible investment. *Management Decision*, 53(3), 571-604.
- Mehwish., Afeef, M., & Kakakhel, S. J. (2022). ESG Factors and their Influence on the Investment Behavior of Individual Investors: A Case from Pakistan. *International Journal of Business and Management Sciences*, 3(3), 21-45. <https://www.ijbms.org>. E-ISSN 2708-4337.
- Michelson, G., Wailes, N., Van Der Laan, S., & Frost, G. (2004). Ethical Investment Processes and Outcomes. *Journal of Business Ethics*, 52(1), 1–10. <https://doi.org/10.1023/B:BUSI.0000033103.12560.be>
- Mirae Asset Mutual Fund. (2021). *Mirae Asset ESG Sector Leaders ETF*. [https://www.miraeassetmf.co.in/docs/default-source/product-presentations/mirae-asset-esg-sector-leader-etf-fof-\(1\).pdf?sfvrsn=4a139cd5\\_2](https://www.miraeassetmf.co.in/docs/default-source/product-presentations/mirae-asset-esg-sector-leader-etf-fof-(1).pdf?sfvrsn=4a139cd5_2)
- Miralles-Quirós, M. D. M., & Miralles-Quirós, J. L. (2017). Improving Diversification Opportunities for Socially Responsible Investors. *Journal of Business Ethics*, 140(2), 339–351. <https://doi.org/10.1007/s10551-015-2691-4>
- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59–82. <https://doi.org/10.26458/1746>
- Moore, W. H. (2004). *The Environment and Sustainability as Investment Themes: Risk and Return Characteristics*. IWOe Discussion Paper No. 110. Institute for Economy and the Environment, University of St. Gallen.
- Morgan Stanley (2022). *2022 ESG Report: Diversity & Inclusion, Climate, and Sustainability*.
- MSCI. (2023, November 30). *MSCI India ESG Leaders Index (USD)*. Index Factsheet. <https://www.msci.com/documents/10199/06d20a9e-bd6b-4ea8-a7a2-31cfb0444273>
- Munusamy, D. (2015). Perception and Awareness of an Ethical Investor's about the Shariah Investment in India. *International Journal of Economic Research (IJER)*, 12(4), 1051-1066. ISSN: 0972-9380. <https://www.researchgate.net/publication/305015566>
- Murtaza, S., Mahmood, H., Noor, R. F., Sahdat, M., & Khan, J. (2013). Risk Perception of Socially Responsible Investors in Muslim Countries. *European Scientific Journal*, 9(31), 400-412.
- Nagpal, A., & Chadha, M. (2021). Investing in SRI Mutual Funds – An initiative to Sustainable development (General perspective of Delhi/NCR Investors). *Journal of Contemporary Issues in Business and Government*, 27(1), 2241-2250. <https://cibg.org.au/>
- Nair, A. S., & Ladha, R. (2013). *Investor characteristics, investment goals and choice: A test of the mediating effect of social investment efficacy on socially responsible investing behaviour in India* (Working Paper No. IIMK/WPS/124/FIN/2013/10).
- Narayanan, E. A., & Sirigauri, N. (n.d.). *ESG Investing in India*.

- Nath, S. (2021). The Business of Virtue: Evidence from Socially Responsible Investing in Financial Markets. *Journal of Business Ethics*, 169(1), 181–199. <https://doi.org/10.1007/s10551-019-04291-9>
- National Stock Exchange. (2023, November 30). *NSE Indexogram NIFTY100 ESG Index*. [https://niftyindices.com/Factsheet/Factsheet\\_NIFTY100\\_ESG\\_Index.pdf](https://niftyindices.com/Factsheet/Factsheet_NIFTY100_ESG_Index.pdf)
- Newell, G. (2009). Developing a socially responsible property investment index for UK property companies. *Journal of Property Investment & Finance*, 27(5), 511–521. <https://doi.org/10.1108/14635780910982368>
- Nilsson, J. (2008). Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior. *Journal of Business Ethics*, 83(2), 307–325. <https://doi.org/10.1007/s10551-007-9621-z>
- Ninan, A. A. (2019). *Gold as an Investment Avenue: A Study of Government Employees in Kerala* [Doctoral dissertation, Mahatma Gandhi University].
- Nippon India Mutual Fund. (2021). *Nippon India Shariah BeEs*. <https://mf.nipponindiaim.com/FundsAndPerformance/ProductNotes/NipponIndia-ETF-Shariah-BeES.pdf>
- Nishad, M. (2018). *Share Price Volatility in Indian Stock Market: A Study with Special Reference to Behavioral Aspects of Investors in Kerala* [Doctoral dissertation, University of Calicut].
- Norup, A., & Gottlieb, M. (2011). *Socially Responsible Investing: An assessment of the concept on the Danish market* [Master thesis, Copenhagen Business School].
- OECD. (2007). *Recent Trends and Regulatory Implications in Socially Responsible Investment for Pension Funds*.
- Osman, I., Ma'in, M., Muda, R., Husni, N. S. A., Alwi, S. F. S., & Hassan, F. (2019). Determinants of behavioural intention towards green investments: The perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16-38. <https://www.researchgate.net/publication/342656095>
- Osman, I., Subramaniam, G., Mohamad, S., Hanif, A., Hassan, F., & Yaakob, S. (2020). The Adoption of Socially Responsible Investments: Gen-Y Perspectives. *Malaysian Journal of Consumer and Family Economics*, 194-222.
- Owen, A. L., & Qian, Y. (2008). *Determinants of Socially Responsible Investment Decisions*.
- Paetzold, F., & Busch, T. (2014). Unleashing the Powerful Few: Sustainable Investing Behaviour of Wealthy Private Investors. *Organization & Environment*, 27(4), 347–367. <https://doi.org/10.1177/1086026614555991>
- Pancholi, G., Pancholi, M., & Saxena, A. (2022). ESG investing: Aligning sustainability with investments. *The Management Accountant*, 47-49.
- Pastakia, A. (2014). *Socially Responsible Business in India and the Asia-Pacific: Meeting the Challenges of Inclusive Sustainable Development*. (Working Paper No. CREED/2014/02, Nov.).
- Pfotenhauer, R. (2022). *Socially Responsible Investors: The Rise of ESG*. Conference Paper. <https://www.researchgate.net/publication/362323568>
- Pitluck, A. Z. (2008, March 15). *Moral Behavior in Stock Markets: Islamic Finance and Socially Responsible Investment*.

- PRI (Principles for Responsible Investment). (2021). *A Blueprint for Responsible Investment*. <https://www.unpri.org/download?ac=5330>
- Puaschunder, J. M. (2016). On the emergence, current state, and future perspectives of Socially Responsible Investment (SRI). *The Journal of Sustainable Development*, 16 (1), 38-63.
- Quant Mutual Fund. (2023, April 14). *Quant ESG Equity Fund*. [https://quantmutual.com/Admin/SIDPdf/quant%20ESG%20Equity%20Fund\\_SID%202023.pdf](https://quantmutual.com/Admin/SIDPdf/quant%20ESG%20Equity%20Fund_SID%202023.pdf)
- Quantum Mutual Fund. (2023, October 31). *Scheme Information Document: Quantum India ESG Equity Fund*. <https://www.quantumamc.com/FileCDN/ImportantDocuments/Scheme-Information-Document/SID-Quantum-India-ESG-Equity-Fund.pdf>
- Rana, S., & Vibha. (2017). Marital Status and Investment Preferences. *Online International Interdisciplinary Research Journal*, 07, 91-98. ISSN: 2249-9598. <http://www.oijrj.org/issn-2249-9598.html>
- Rathner, S. (2012). *The Performance of Socially Responsible Investment Funds: A Meta-Analysis* (Working Paper No. 2012-03). University of Salzburg.
- Raut, R. K., Das, N., & Kumar, R. (2018). Extending the Theory of Planned Behaviour: Impact of Past Behavioural Biases on the Investment Decision of Indian Investors. *Asian Journal of Business and Accounting*, 11(1), 265–291. <https://doi.org/10.22452/ajba.vol11no1.9>
- Raut, R. K., Kumar, R., & Das, N. (2021). Individual investors' intention towards SRI in India: An implementation of the theory of reasoned action. *Social Responsibility Journal*, 17(7), 877–896. <https://doi.org/10.1108/SRJ-02-2018-0052>
- Reddy, K., & Bather, A. (2013). Institutional investors, firm performance, and the prospects for socially responsible investing: Evidence from New Zealand. In *Critical Studies on Corporate Responsibility, Governance and Sustainability* (pp. 149–175). Emerald Group Publishing Limited. [https://doi.org/10.1108/S2043-9059\(2013\)0000005015](https://doi.org/10.1108/S2043-9059(2013)0000005015)
- Reka, R. B. (2017). A study on perception towards socially responsible investment behaviour among retail investors in Chennai. *International Journal of Management and Social Science Research Review*, 1(37), 207-209.
- Richardson, B. (2015). Financial markets and socially responsible investing. *Company Law and Sustainability: Legal Barriers and Opportunities*, 226-273. Cambridge: Cambridge University Press. doi:10.1017/CBO9781107337978.008
- Roca, E., Wong, V. S. H., & Anand Tularam, G. (2010). Are socially responsible investment markets worldwide integrated? *Accounting Research Journal*, 23(3), 281–301. <https://doi.org/10.1108/10309611011092600>
- Rosen, B. N., Sandler, D. M., & Shani, D. (1991). Social Issues and Socially Responsible Investment Behavior. *The Journal of Consumer Affairs*, 25(2), 221-234.
- Roundy, P., Holzhauer, H., & Dai, Y. (2017). Finance or philanthropy? Exploring the motivations and criteria of impact investors. *Social Responsibility Journal*, 13(3), 491–512. <https://doi.org/10.1108/SRJ-08-2016-0135>
- Sajoy, P. B. (2015). *Savings and Investment Pattern of Stock Investors in Kerala State* [Doctoral dissertation, Mahatma Gandhi University].

- Samant, M. D., & Singh, R. S. P. (2022). Post Covid Surge in ESG Mutual Funds in India: Is it A Structural Break? *Journal of Positive School Psychology*, 6(8), 600-609. <http://journalppw.com>
- Sánchez, N., & Escolano, C. (2010). Qualitative Analysis of Socially Responsible Investment Funds in Spain. *FETS - Observatori de les Finances Ètiques*.
- Sarang, G. K. (2021). *Resurgence of ESG Investments in India: Toward a Sustainable Economy*. Asian Development Bank Institute. ADBI Working Paper Series No. 1284.
- Satya Sekhar, G. V. (2011). Green Funds & Green Investing: A New Route to Green India. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1872370>
- SBI Mutual Fund. (2023, January 31). *SBI Magnum Equity ESG Fund*. [https://www.sbimf.com/docs/default-source/scheme-factsheets/sbi-magnum-equity-esg-fund-factsheet-9e32b0e9-b650-4e88-950c-8625113ccd7f.pdf?sfvrsn=fa2d5b9b\\_2](https://www.sbimf.com/docs/default-source/scheme-factsheets/sbi-magnum-equity-esg-fund-factsheet-9e32b0e9-b650-4e88-950c-8625113ccd7f.pdf?sfvrsn=fa2d5b9b_2)
- Schepers, D. H., & Prakash Sethi, S. (2003). Bridging the Gap Between the Promise and Performance of Socially Responsible Funds: Do Socially Responsible Funds Actually Deliver What They Promise? *Business and Society Review*, 108(1), 11–32. <https://doi.org/10.1111/1467-8594.00006x>
- Scholtens, B. (2005). What drives socially responsible investment? The case of the Netherlands. *Sustainable Development*, 13(2), 129–137. <https://doi.org/10.1002/sd.252>
- Schröder, M. (2003). Socially Responsible Investments in Germany, Switzerland and the United States—An Analysis of Investment Funds and Indices. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.421462>
- Schröder, M. (2004). The performance of socially responsible investments: Investment funds and indices. *Financial Markets and Portfolio Management*, 18(2).
- SEBI. (n.d.) *Consultation Paper on ESG Disclosures, Ratings and Investing*.
- SEBI. (n.d.) *Business Responsibility and Sustainability Reporting by listed entities*.
- Sethi, S. P. (2005). Investing in Socially Responsible Companies is a must for Public Pension Funds? Because there is no Better Alternative. *Journal of Business Ethics*, 56(2), 99–129. <https://doi.org/10.1007/s10551-004-5455-0>
- Shah, M. S. (2018). A Study of Essence of Socially Responsible Investment and Environmental, Social and Governance (ESG)-linked Investment Market in India. *International Journal for Research Trends and Innovation*, 3(8), 215-219.
- Shank, T., Manullang, D., & Hill, R. (2005). “Doing Well While Doing Good” Revisited: A Study of Socially Responsible Firms’ Short-Term versus Long-term Performance. *Managerial Finance*, 31(8), 33–46. <https://doi.org/10.1108/03074350510769794>
- Sharma, N. K. (2016). Corporate Social Responsibility Is Not a Charity but a Responsibility in India. *VSRD International Journal of Business and Management Research*, 6(2), 57-62. <https://www.vsrjournals.com>
- Sharma, R., Mehta, K., & Vyas, V. (n.d.). *Factors Affecting Socially Responsible Behavior of Indian Investors: Using EFA and DEMATEL*.
- Sharma, S. (2022). BSE Greenex: A Pre & Post Covid-19 Empirical Study. *Procedia Computer Science*, 214, 149–155. <https://doi.org/10.1016/j.procs.2022.11.160>

- Siddiqui, A. U. (2018). The Demography of Socially Responsible Investors across Countries and Time: A Systematic Review. *Asian Journal of Managerial Science*, 7(2), 7–15. <https://doi.org/10.51983/ajms-2018.7.2.1330>
- Singh, M., Mittal, M., Mehta, P., & Singla, H. (2020). Personal values as drivers of socially responsible investments: a moderation analysis. *Review of Behavioral Finance*, 13(5), 543-565. <https://doi.org/10.1108/RBF-04-2020-0066>
- Singhal, C. (2021). A Study on ESG Investments and Millennial Investors in India. *International Journal of Creative Research Thoughts (IJCRT)*, 9(6), d681-d685. [www.ijcrt.org](http://www.ijcrt.org)
- Singhal, C. (2021). A Study on ESG Investments and Millennial Investors in India. *International Journal of Creative Research Thoughts (IJCRT)*, 9(6), d681-d685. [www.ijcrt.org](http://www.ijcrt.org)
- Sinha, R., & Datta, M. (2019). Institutional Investments and Responsible Investing. In M. Ziolo & B. S. Sergi (Eds.), *Financing Sustainable Development*, 127–168. Springer International Publishing. [https://doi.org/10.1007/978-3-030-16522-2\\_6](https://doi.org/10.1007/978-3-030-16522-2_6)
- Sinha, R., & Juneja, M. (2022). Environmental, Social, Governance Financing Goals in Post-COVID-19 World. *Journal of Resources, Energy and Development*, 17(2), 31–40. <https://doi.org/10.3233/RED-170203>
- Slaper, T. F., & Hall, T. J. (2011). *The Triple Bottom Line: What Is It and How Does It Work?* Indiana Business Review, Spring.
- Social Investment Forum. (2006). *Report on Socially Responsible Investing Trends in the United States: 10-Year Review*.
- Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2022). Did ESG portfolio augment investors' wealth during Covid-19? Evidence from Indian stock market. *Sustainability Accounting Management and Policy Journal*, 14(2). <https://doi.org/10.1108/SAMPJ-02-2022-0087>
- Sood, K., Pathak, P., Jain, J. & Gupta, S. (2023). How does an investor prioritize ESG factors in India? An assessment based on fuzzy AHP. *Managerial Finance*, 49(1), 66-87. <https://doi.org/10.1108/MF-04-2022-0162>
- Sorrosal-Forradellas, M.-T., Barberà-Mariné, M.-G., Fabregat-Aibar, L., & Li, X. (2023). A new rating of sustainability based on the Morningstar Sustainability Rating. *European Research on Management and Business Economics*, 29(1), 100208. <https://doi.org/10.1016/j.iedeen.2022.100208>
- Sparkes, R. (2002). *Socially Responsible Investment: A Global Revolution*. John Wiley & Sons, Ltd.
- Sparkes, R., & Cowton, C. J. (2004). The Maturing of Socially Responsible Investment: A Review of the Developing Link with Corporate Social Responsibility. *Journal of Business Ethics*, 52(1), 45–57. <https://doi.org/10.1023/B:BUSI.0000033106.43260.99>
- Stakeholders Empowerment Services (SES). (n.d.). *ESG Scores - Top 100 Listed Companies in India: ESG Research Report*.
- Stenström, H. C., & Thorell, J. J. (2007). *Evaluating the Performance of Socially Responsible Investment Funds: A Holding Data Analysis* [Master thesis, Stockholm School of Economics].
- Strong, S. (2010). Development of SRI Funds and Markets. *Journal of Financial Transformation*, 29, 123-130.
- Sudha, S. (2015). Risk-return and Volatility analysis of Sustainability Index in India. *Environment, development and sustainability*, 17, 1329-1342.
- Sue, V. M., & Ritter, L. A. (2012). *Conducting Online Surveys*. Sage Publications, Inc.

- Sultana, S., Zulkifli, N., & Zainal, D. (2018). Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. *Sustainability*, *10*(6), 1831. <https://doi.org/10.3390/su10061831>
- Sun, M., Nagata, K., & Onoda, H. (2011). The Investigation of the Current Status of Socially Responsible Investment Indices. *Journal of Economics and International Finance*, *3*(13), 676-684.
- Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3205040>
- Talha, M., Abdullah Salim, A. S. A., Ismail, H., & Anantharaman, R. N. (2016). Sensitivity of Socially Responsible Investment Behavior to Gender. *I J A B E R*, *14*(3), 1587-1604.
- Talha, M., Salim, A. S. A., Jalil, A. A. A., & Yatim, N. M. (2020). Sensitivity of Socially Responsible Investment Behaviour to Experience and Size of Funds. *The Journal of Applied Business Research*, *36*(2), 77-90.
- Talha, M., Salim, A. S. A., Masoud, S. B., & Abu Said, A.-M. (2012). Explaining SRI behaviour of Malaysian unit trust fund managers using theory of planned behavior. *Corporate Ownership and Control*, *9*(4), 108–117. <https://doi.org/10.22495/cocv9i4art8>
- Tata Mutual Fund. (2023). *Tata Ethical Fund*. [https://www.tatamutualfund.com/docs/default-source/scheme-brochures/2023/may/tata-ethical-fund\\_1pager.pdf?sfvrsn=575d19e7\\_4](https://www.tatamutualfund.com/docs/default-source/scheme-brochures/2023/may/tata-ethical-fund_1pager.pdf?sfvrsn=575d19e7_4)
- Taurus Mutual Fund. (2023, April 30). *Taurus Ethical Fund: Key Information Memorandum*. [https://www.taurusmutualfund.com/sites/default/files/2023-09/KIM\\_Taurus\\_Ethical\\_Fund\\_0.pdf](https://www.taurusmutualfund.com/sites/default/files/2023-09/KIM_Taurus_Ethical_Fund_0.pdf)
- Thanki, H., Shah, S., Rathod, H. S., Oza, A. D., & Burduhos-Nergis, D. D. (2022). I Am Ready to Invest in Socially Responsible Investments (SRI) Options Only If the Returns Are Not Compromised: Individual Investors' Intentions toward SRI. *Sustainability*, *14*(18), 11377. <https://doi.org/10.3390/su141811377>
- The Global Statistics. (2023). *Literacy Rate in India 2023 | Kerala & Bihar Literacy Rate 2023*. <https://www.theglobalstatistics.com/literacy-rate-in-india/>
- The World Bank. (2020). *Resources-Sustainable Development Bonds & Green Bonds: Impact Report 2020*.
- Tobias Peylo, B. (2014). Rational socially responsible investment. *Corporate Governance*, *14*(5), 699–713. <https://doi.org/10.1108/CG-08-2014-0089>
- Tripathi, V., & Bhandari, V. (2015). Socially responsible stocks: A boon for investors in India. *Journal of Advances in Management Research*, *12*(2), 209–225. <https://doi.org/10.1108/JAMR-03-2014-0021>
- Utz, S., & Wimmer, M. (2014). Are they any good at all? A financial and ethical analysis of socially responsible mutual funds. *Journal of Asset Management*, *15*, 72-82.
- Vandekerckhove, W., & Leys, J. (2007). Information Asymmetries in Socially Responsible Investment. *Philosophica*, *80*, 5-19.
- Vandekerckhove, W., Leys, J., & Van Braeckel, D. (2007). That's not what happened and it's not my fault anyway! An exploration of management attitudes towards SRI-shareholder engagement. *Business Ethics: A European Review*, *16*(4), 403–418. <https://doi.org/10.1111/j.1467-8608.2007.00512.x>

- Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, 8(2), 169–178. <https://doi.org/10.1108/JGR-11-2016-0029>
- Viviers, S., Bosch, J., Smit, E., & Buijs, A. (2009). Responsible investing in South Africa. *Investment Analysts Journal*, 38(69), 3–16. <https://doi.org/10.1080/10293523.2009.11082505>
- von Wallis, M., & Klein, C. (2015). Ethical requirement and financial interest: A literature review on socially responsible investing. *Business Research*, 8, 61–98. <https://doi.org/10.1007/s40685-014-0015-7>
- Vyas, V., Mehta, K., & Sharma, R. (2020). Investigating socially responsible investing behaviour of Indian investors using structural equation modelling. *Journal of Sustainable Finance & Investment*, 12(2). <https://doi.org/10.1080/20430795.2020.1790958>
- Wagstaff, E., & Belsom, T. (n.d.). *An Introduction to Responsible Investment*. Principles of Responsible Investment. <https://www.unpri.org/download?ac=10223>
- Wiesel, M., Myrseth, K. O. R., & Scholtens, B. (2016). *Social preferences and socially responsible investing: A survey of US investors*. (Working Papers in Responsible Banking & Finance). University of St Andrews.
- Wimmer, M. (2013). ESG-persistence in Socially Responsible Mutual Funds. *Journal of Management and Sustainability*, 3(1), p9. <https://doi.org/10.5539/jms.v3n1p9>
- World Federation of Exchanges (WFE). (2018). *WFE Sustainability Principles 2018*.
- World Federation of Exchanges (WFE). (2019). *WFE Annual Sustainability Survey*.
- Yen, M., Shiu, Y., & Wang, C. (2019). Socially responsible investment returns and news: Evidence from Asia. *Corporate Social Responsibility and Environmental Management*, 26(6), 1565–1578. <https://doi.org/10.1002/csr.1833>
- Yew, C. M., Ni, L. K., Sin, L. P., & Chen, Y. P. (2019). *Factors that Affect Investor's Intention to Invest in Social Responsibility Investment (SRI)* [Bachelor of Finance (HONS) Project, Universiti Tunku Abdul Rahman].
- Yong, T., Ma, S.-h., & Gong, F.-m. (2007). *Empirical Study on Impact of Logistics Operations Capability on Supply Chain Performance*.

## Websites

<http://www.eurosif.org/sri>

<http://www.uksif.org/Z/Z/Z/sri/main/index.shtml>

<http://www.unpri.org>

<https://mpa.ub.uni-muenchen.de/65828/>

<https://mutualfund.adityabirlacapital.com>

<https://seekingalpha.com>

<https://stats.unctad.org>

<https://www.assetmanagement.hsbc.co.in>

<https://www.avendus.com>

<https://www.axismutualfund.com>  
<https://www.businessinsider.in>  
<https://www.cnbctv18.com>  
<https://www.financialexpress.com>  
<https://www.gsi-alliance.org>  
<https://www.invescomutualfund.com>  
<https://www.kotakmf.com>  
<https://www.marketexpress.in>  
<https://www.mf.nipponindiaim.com>  
<https://www.miraeassetmf.co.in>  
<https://www.msci.com>  
<https://www.mutualfund.adityabirlacapital.com>  
<https://www.niftyindices.com>  
<https://www.quantmutual.com>  
<https://www.QuantumAMC.com>  
<https://www.sbimf.com>  
<https://www.sebi.gov.in>  
<https://www.tatamutualfund.com>  
<https://www.taurusmutualfund.com>  
<https://www.theglobalstatistics.com>  
<https://www.vbdo.nl/en/about-vbdo/>



## **ANNEXURE-I**

**INVESTORS' PERCEPTION TOWARDS SOCIALLY RESPONSIBLE  
INVESTMENT- A STUDY WITH SPECIAL REFERENCE TO STOCK  
MARKET INVESTORS IN KERALA**

Laya K S

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Contact Number (mobile): 85920#####

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Dear participants,

This questionnaire has been structured to gather data as part of the research conducted to obtain a PhD degree from the University of Calicut. My name is Laya K S, PhD Research Scholar from the Department of Commerce, Vimala College (Autonomous), Thrissur. I am doing research under the guidance of Dr. Salini K, Assistant Professor from the Department of Commerce, Vimala College (Autonomous), Thrissur. My research topic is Investors' Perception towards Socially Responsible Investment (SRI) - A Study with Special Reference to Stock Market Investors in Kerala. My research objective is to understand to what extent the investors in Kerala are aware of the concept of socially responsible investment and how they perceive it. The result of this study may contribute to increasing the awareness of socially responsible investment and the various investment options available under SRI. It may also help investors to identify and invest in socially responsible companies, thereby contributing to sustainable development.

Your participation in this survey is greatly appreciated, and I request your cooperation in completing this questionnaire following the instructions. I assure you that your personal information will be treated with complete confidentiality and will only be used for academic purposes. If you have any questions or need clarification

regarding this study, please do not hesitate to contact me. Below, you will find the criteria of my study for your reference.

I look forward to your support and cooperation in this matter. Thank you for dedicating your time to filling out this questionnaire.

➤ Inclusion Criteria:

- Investors having an active demat account.
- Investors belong to any of the selected districts (Thiruvananthapuram, Ernakulam and Kozhikode).

## Questionnaire

### Section 1: Demographic information of respondents

Please put  $\checkmark$  in the appropriate columns

1. District:
  - a. Trivandrum
  - b. Ernakulam
  - c. Kozhikode
2. Residential Location:
  - a. Corporation
  - b. Municipality
  - c. Grama Panchayat
3. Gender:
  - a. Male
  - b. Female
  - c. Others
4. Age:
  - a. Below 30 years
  - b. 30-60 years
  - c. Above 60 years
5. Educational Qualification:
  - a. Below SSLC
  - b. SSLC
  - c. Plus Two

- d. Graduation
- e. Post-Graduation
- f. Any other (Please Specify) \_\_\_\_\_
6. Occupation:
- a. Business
- b. Profession
- c. Government Employee
- d. Private Employee
- e. Retired
- f. Any other (Please Specify) \_\_\_\_\_
7. Marital Status:
- a. Single
- b. Married
- c. Widowed
- d. Separated
8. What is your approximate average annual income from all sources together?  
(in rupees)
- a. Below Rs. 250000
- b. Rs. 250001- Rs. 500000
- c. Rs.500001- Rs. 750000
- d. Rs.750001- Rs. 1000000
- e. Above Rs. 1000000

**Section2: Information related to Stock Market Participation**

9. How long have you been operating in the stock market?
- a. Below 1 year
- b. 1 year - 3 years
- c. 3 years - 5 years
- d. 5 years -10 years
- e. Above 10 years

10. In which of the following investment avenues do you prefer to invest?

- a. Direct equity
- b. Mutual fund
- c. SIP (Systematic Investment Plan)
- d. Any other (Please specify) \_\_\_\_\_

11. Which mode of trading do you prefer?

- a. Online trading
- b. Broker services
- c. Sub broker
- d. Franchisee of a large broker
- e. Any other (Please specify) \_\_\_\_\_

12. Your average holding period of Shares:

- a. Below 1 year
- b. 1 year - 3 years
- c. 3 years - 5 years
- d. Above 5 years

13. How would you rate your knowledge in understanding your investments?

- a. Excellent
- b. Very good
- c. Good
- d. Fair
- e. Poor

14. Indicate the frequency of trading in the stock market

- a. Daily
- b. Weekly
- c. Monthly
- d. Yearly
- e. Occasionally

15. What are your motives for investing in the stock market?

(Rank the following in the order of your preference from 1 to 7)

- a. Return
- b. Safety
- c. Liquidity
- d. Capital appreciation
- e. Tax Benefit
- f. Diversification benefit
- g. To take part in the CSR activities of the company

16. What kind of investment are you interested to look for?

- h. High Risk - High Return
- i. Low Risk - Low Return
- j. Normal Risk-Normal Return

17. If your share value gives negative returns over a period of time, what would you prefer to do?

- a) Will withdraw money from the investment.
- b) Will wait till the loss is recovered and then withdraw the money.
- c) Will opt to invest more since the market is comparatively cheaper.
- d) Will reinvest money in other stocks.
- e) Will invest a part of it in alternative strategies.
- f) Any other

**Section 3: Awareness on different aspects of socially responsible investment**

18. Are you aware of the following concepts?

Concepts	Extremely aware	Moderately aware	Somewhat aware	Slightly aware	Not at all aware
a. Socially responsible investment					
b. Ethical					

investment					
c. Community investment					
d. ESG investment					
e. Sustainable investment					
f. Mission-based investment					
g. Impact investment					
h. Islamic investment					
i. Green bond					
j. Green governance					

19. Are you aware of these indices?

Index name	Extremely aware	Moderately aware	Somewhat aware	Slightly aware	Not at all aware
a. S&P BSE 100 ESG Index					
b. S&P BSE CARBONEX					
c. S&P BSE GREENEX					
d. NIFTY100 ESG Index					
e. NIFTY 100 Enhanced ESG Index					
f. MSCI ESG India Index					

20. Are you aware of these funds, which are based on the ESG theme? (ESG- Environmental, social and governance.)

Fund name	Extremely aware	Moderately aware	Somewhat aware	Slightly aware	Not at all aware
a. SBI Magnum Equity ESG Fund					
b. Tata Ethical Fund					
c. Nippon India Shariah BeEs					
d. Axis ESG Equity Fund					
e. Quantum India ESG Equity Fund					
f. Taurus Ethical Fund					
g. Avendus India ESG Fund					
h. Mirae Asset ESG Sector Leaders ETF					
i. Aditya Birla Sun Life ESG fund					
j. ICICI prudential ESG fund					
k. Kotak ESG opportunities					



fund					
l. Quant ESG equity fund					
m. Invesco ESG equity fund					
n. HSBC Global Equity Climate Change Fund of Fund					

21. Read the following questions which are related to social responsibility and please put tick marks in the appropriate columns.

Questions	Never	Almost never	Sometimes	Almost every time	Every time
a. Are you keen on noticing the CSR initiatives of the companies you have invested in?					
b. Have you heard of the sustainability reporting of companies?					
c. Have you ever noticed those companies which are doing sustainability reporting?					

d. Have you received information about sustainability rating agencies?					
e. Have you received information about ESG (Environment, Social and Governance) scores of companies?					
f. Have you ever noticed companies that constitute sustainability-themed indices?					

**Section 4: Perception towards different aspects of socially responsible investment**

22. What is your opinion on integrating the concept of social responsibility into stock market investment?

- a. Not at all important
- b. Slightly Important
- c. Neutral
- d. Very Important
- e. Extremely Important

23. If the current company you have invested in, likes to include ‘social responsibility’ criteria in its investment decision, will you support this initiative?

- a. Strongly oppose
- b. Somewhat oppose
- c. Neutral
- d. Somewhat favour
- e. Strongly favour

24. Have you ever invested in a socially responsible fund?

(If the answer is ‘yes’ then please answer the question no. 25 otherwise answer the question no. 26)

Yes  No

25. What is the motive behind your *preference* for a socially responsible investment?

(Please answer this question, if your answer is “Yes” for the question no.24)

- a. Security of investing in sustainable products
- b. Reasonable return
- c. As a part of social and environmental commitment
- d. Ethical or religious reasons
- e. Advice from bank
- f. Any other (Please specify) \_\_\_\_\_

26. What is the reason behind *not preferring* for a socially responsible investment?

(Please answer this question, if your answer is “No” for the question no.24)

- a. Lack of awareness
- b. Low returns
- c. Profit motivated
- d. Lack of commitment
- e. Doubts about the relationship between social and environmental variables and returns
- f. Lack of governmental endorsement
- g. Any other (Please specify) \_\_\_\_\_

27. What is your opinion on the risks related to socially responsible investments as compared to conventional investments?

- a. Very lower risk
- b. Lower risk
- c. Similar risk
- d. Higher risk
- e. Very higher risk

28. As an investor, in which among the industries, you would *not be interested* to invest in

(Please put  $\checkmark$  in the appropriate columns)

Industries	Extremely interested	Very interested	Moderately interested	Slightly interested	Not at all interested
Alcohol					
Tobacco					
Animal abuse					
Genetically modified food					
Arms industry					
Pesticides/Chemicals					
Production of pornography or violent material					
Nuclear power generation					

29. If the company you have invested in is found to be socially irresponsible, what would you prefer to do?

SI. No	Statements	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
a.	Will not bother and continue with the investment.					
b.	Will withdraw money from the investment.					
c.	Will recommend others to not invest in the company.					
d.	Will use the right as a shareholder and take actions to correct the company.					
e.	Will take legal action against the company.					

30. At the time of your investment in a socially responsible fund, which method/methods of trading strategy would you prefer?

- a. Negative screening (socially dangerous or polluting options are excluded from the available investment alternatives).
- b. Positive screening (invest in companies with a commitment to responsible business practices).
- c. Best-in-class (selects the leading companies with regard to social/environmental/ethical criteria).
- d. Ethical exclusion (excludes companies based on ethical criteria).
- e. Norm-based screening (positive or negative screenings of companies with respect to their compliance with international standards and norms).
- f. Thematic investment (invests in selected sectors/companies that play a key role in sustainable development).
- g. Integration (includes social/environmental/ethical considerations in traditional financial analysis).

## Section 5: Behavioural intention towards SRI

31. As an investor, what is your opinion on the following statements?

SI. No.	Statements	Strongly Agree	Agree	Neither agree or disagree	Dis agree	Strongly Disagree
<b>Attitude</b>						
a.	I believe that socially responsible funds are good.					
b.	I have a favourable attitude towards investing in socially responsible companies.					
c.	I believe that investing in a socially responsible fund is a wise decision.					
d.	I believe that socially responsible funds are ethical.					
e.	I like the idea to invest in socially responsible investment stock.					
<b>Subjective norms</b>						
a.	People who are important to me think that investing in socially responsible funds is a good idea.					

b.	People who are important to me would think that I should invest in socially responsible funds if I were to invest.					
c.	People who are important to me think that investing in a socially responsible fund would be a wise idea.					
d.	My colleagues and friends are investing in SRI stocks.					
<b>Perceived behavioural control</b>						
a.	If I want to invest in socially responsible funds, I can easily do so.					
b.	I have the knowledge to invest in socially responsible funds.					
c.	There are plenty of opportunities for me to invest in socially responsible funds.					
d.	It is difficult to find out socially responsible companies.					
<b>Environmental factors</b>						
a.	By investing in socially responsible funds, I can have a					

	positive effect on the environment.					
b.	The companies should have a good environmental management system.					
c.	I always prefer environment-friendly products.					
d.	I make a special effort to find and invest in stocks of socially responsible companies.					
e.	I would switch my investment for ecological reasons.					
f.	The companies should opt for environment-friendly technologies and recycling policies.					
g.	The companies should put effort towards reducing pollution and carbon emissions.					
h.	The companies should encourage the use of renewable energy sources, resource reduction and product innovation.					



i.	When I would have a choice to invest between two companies, I will invest in the one whose product is less harmful to other people and the environment.					
<b>Social factors</b>						
a.	The companies should be more responsible to society.					
b.	The companies should encourage donations to charitable institutions.					
c.	The company should treat its employees, customers and suppliers fairly (should not practice discrimination).					
d.	I can improve society's quality of life by investing using 'social responsibility' criteria.					
e.	Companies should respect human rights.					
f.	The companies should ensure a healthy and safe					

	workplace for the workers.					
<b>Corporate governance factors</b>						
a.	My investments will have a positive bearing on corporate governance.					
b.	Companies should respect the rights and equality of shareholders.					
c.	There should be a good system of accountability and transparency in the operation of companies.					
d.	There should be a proper code of conduct for companies that I have invested.					
e.	The company should not be involved in unethical business behaviours (fraud, price manipulation, and bribery).					
f.	Exertion of my voting rights can positively influence the company.					
g.	There should be key stakeholder engagement and feedback system.					

h.	There should be proper auditing of accounts.					
<b>Financial performance</b>						
a.	Financial return is my main concern for investment.					
b.	I believe that the return rate of socially responsible investment will meet my expectation.					
c.	I believe socially responsible funds will generate profit.					
d.	I believe portfolio performance can be improved by adding SRI shares.					
e.	I think that non-SRI funds perform financially better compared to SRI funds.					
f.	I prefer to invest in SRI fund without taking profit into consideration.					
g.	I believe that the inclusion of ‘social responsibility’ criteria will reduce the scope of profitable investments.					

<b>Behavioural Intention</b>						
a.	I have intention to switch from conventional investment to invest in socially responsibility investment.					
b.	I am willing to include social responsibility investment in my investment portfolio.					
c.	I have the intention to start or continue to invest in socially responsible funds.					
d.	If I get an opportunity, I would invest in socially responsible funds.					
e.	I may invest in socially responsible funds in the future.					

*Thank you for your co-operation*

## **ANNEXURE-II**



# VIMALA COLLEGE

(Autonomous)

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(Affiliated to the University of Calicut & Nationally Re-accredited with A+ Grade - 4<sup>th</sup> Cycle)


## HUMAN RESEARCH ETHICS COMMITTEE

### CERTIFICATE OF APPROVAL


This is to certify that the Human Research Ethics Committee of Vimala College (Autonomous) Thrissur, Kerala reviewed and evaluated the ethical suitability of the research undertaken by Ms Laya K S, PhD Research Scholar in Commerce titled "Investors Perception Towards Socially Responsible Investment (SRI)- A Study with Special Reference to Stock Market Investors in Kerala" and the committee granted ethical approval of the research protocol which was presented before the committee with supporting documents.

The Researcher is required to notify the Coordinator of the Ethics Committee, any significant change to the protocol and the reason for that change, including an indication of ethical implications for further review if required.

The approval number for the same is VC/REC/23-24-5

  
Dr Honey Sebastian  
Coordinator of the Committee  
HOD  
Department of Zoology  
Vimala College (Autonomous)  
Thrissur - 680 009  
Kerala



  
Dr Sr Beena Jose  
Principal  
PRINCIPAL IN-CHARGE  
VIMALA COLLEGE  
(AUTONOMOUS)  
THRISSUR - 680 009

**ANNEXURE-III**  
**LIST OF PAPER PRESENTATIONS**

### Annexure III

#### LIST OF PAPER PRESENTATIONS RELATED TO THE RESEARCH AREA

<b>PAPER TITLE</b>	<b>ORGANISER</b>	<b>VENUE</b>	<b>DATE</b>	<b>EVENT</b>
ESG India Index: The Integration of Environmental, Social and Governance factors to Investments	Post Graduate Department of Commerce, Government College, Tripunithura	Post Graduate Department of Commerce, Government College, Tripunithura	28 <sup>th</sup> Sep 2019	National Research Conference on Commerce, Management and Social Sciences (NRCCMS 1.0)
Socially Responsible Investment in India – An Overview	NSS College, Ottapalam	NSS College, Ottapalam	20 <sup>th</sup> Mar 2019	International Seminar on Emerging Trends in Commerce and Management
Socially Responsible Investment	Sree Narayana College, Alathur	Sree Narayana College, Alathur	7 <sup>th</sup> Mar 2019	National Seminar on Investments and Opportunities in Securities and Derivatives Market
Performance Evaluation of Socially Responsible Funds	Government College, Thripunithura.	Government College, Thripunithura.	12 <sup>th</sup> Sep 2020	National Conference on Innovations in Finance
The Performance of socially Responsible Investment- A Literature Perspective	Alagappa University.	Alagappa University.	13 <sup>th</sup> Oct 2020	International Virtual Conference on Revisiting CSR in the Post Covid Era- Statutory Guidelines & Societal Concerns



Corporate Social Responsibility (CSR) in the Light of Covid-19 Pandemic	St Joseph's College (Autonomous), Thrissur	St Joseph's College (Autonomous), Thrissur	28 <sup>th</sup> Jan 2021	International Virtual Conference on Post-Covid Global Scenario: Threats and opportunities
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**ANNEXURE-IV**  
**LIST OF PUBLICATIONS**

**DIRECTORATE OF RESEARCH, UNIVERSITY OF CALICUT**

**General format for submitting Report on Peer-reviewed Research Publication (latest first)**

Sl. No.	Authors in order and Title of Publication*	Journal Name, Volume, Number, Year & Digital Object Identifier (DOI) Number	Inter-national/ National**	Publisher with ISSN	Web Address of the Journal	Indexed by ***	Impact factor if any
1	Laya K S & Dr. Salini K Socially Responsible Investment- The Changing Face of Investment	South Indian Journal of Social Sciences (UGC Care Group 1 –Bi-annual Journal), Vol.XXI, No.38, Jan-June 2023	National	Academy of Social Sciences ISSN: 0972-8945	<a href="https://journal.sijss.com/">https://journal.sijss.com/</a>		
2	Laya K S & Dr. Salini K Corporate Social Responsibility (CSR) in the Light of Covid-19 Pandemic	ANVESAK (UGC Care Group 1 Journal), Vol.51, Jan-June 2021	National	Sardar Patel Institute of Economic & Social Research (SPIESR). ISSN: 0378-4568	<a href="https://www.spiesr.ac.in/Anvesak">https://www.spiesr.ac.in/Anvesak</a>		
3	Laya K S & Dr. Salini K Socially Responsible Investment (SRI)- A Prelude	International Journal of All Research Education and Scientific Methods (IJARESM), Vol.9, issue 3, Mar 2021 (UGC Approved)	International	IJARESM Publication 2455-6211	<a href="http://www.ijaresm.com/">http://www.ijaresm.com/</a>		7.896
4	Laya K S & Dr. Salini K The Performance of socially Responsible Investment- A Literature Perspective	Shanlax Publications (Conference Proceedings) Oct 2020	National	Shanlax Publications ISBN: 978-93-90082-70-4	<a href="https://www.shanlaxpublications.com/">https://www.shanlaxpublications.com/</a>		

Specific Remark/recommendation of the Chairperson, PGBS/Head of the Research Centre, based on the above criteria:

The candidate has four research papers published out of the approved research work in peer-reviewed/refereed journals. This summary of publication was produced for verification and found satisfactory.

Signature with Date:

Signature with Date:

**Name & Designation**

**Name & Designation**

**Dr. Salini K**

**Dr Sr Beena Jose**

Assistant Professor

Principal, Head of Centre

PG Department of Commerce and Research Centre

Vimala College (Autonomous), Thrissur

Vimala College (Autonomous),

Thrissur

**(Supervisor):**

**(Head of the Institution):**